



Phyt. 926 l (2

The
Botanic Garden:

Consisting of

Highly finished Representations

OF HARDY

ORNAMENTAL FLOWERING

PLANTS,

CULTIVATED IN GREAT BRITAIN,
WITH

Their Classification, History, Culture,

AND

OTHER INTERESTING INFORMATION.

BY

B. MAUND, F.L.S.

Vol.



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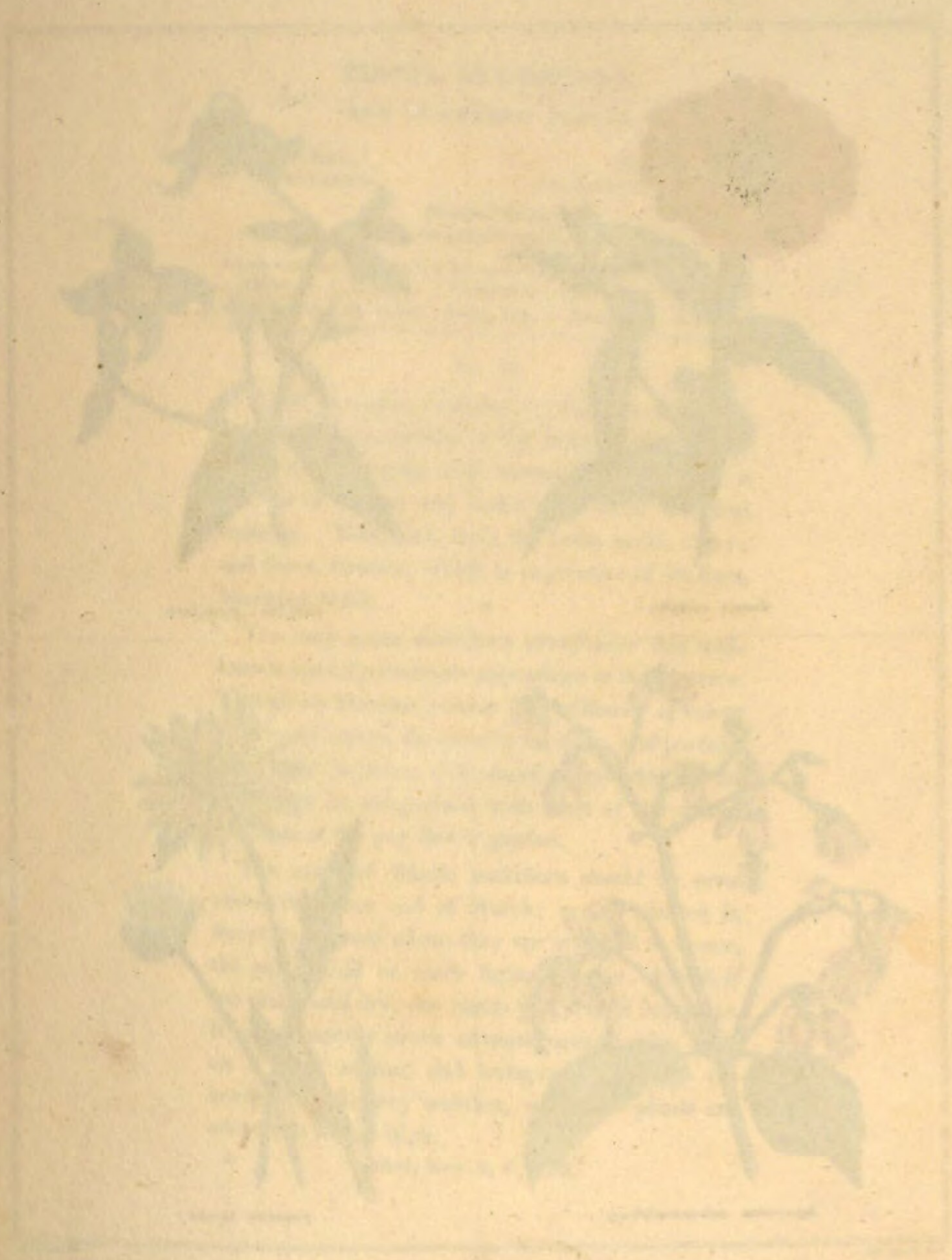
PREFACE.

A PREFACE, sometimes, contains the only good character a book ever enjoys; and that a volume, like the present, may not be cruelly sent forth without testimonials, the Author is inclined to say something in its favour. No one is, surely, more familiar with the merits and demerits of a book than its writer. But the censorious world will not admit this; or it will question his sincerity. Seeing this is the case, it is better to resort to a covert commendation;---to praise the subject in lieu of the work.

Here, then, the Author feels that he has full scope. The world itself is subservient to his views. His is the Vegetable kingdom;---the most beautiful of the three;---his department in it, the very essence of its attractions. The Mineral boasts not half its colours, without the aid of art:---its natural lines are harsh and angular. The Animal kingdom includes elegant outline and brilliant hues; but also an immeasurable drawback;---it has a vitality, yielding more of evil than good; hence power alone can impel it to the accommodation of our views. Not so the Vegetable. All is beauty in spontaneous display; in simple subservience to man; beauty in its incomprehensible number of tints: in its incomprehensible variety of forms; it even breathes a sweetness through the incumbent atmosphere.

Go, then, my little book of flowers, and speed you well;
go visit those elysian spots where Flora always reigns; and
tell the votaries of the goddess how much (like Ovid) your
master sorrows that he can not go with you. Show your
portraits of parterre nobility:---court the influence of their
all-powerful originals, which need no introductory praise.
They find a way to every heart:--their beauty alone is their
surest passport. It secures them the respect of all nations ; for
the polished, and the barbarian, alike display the influence of
its all-pervading energy. "There is nothing," says Addison,
" that makes its way more directly to the soul than beauty.
It immediately diffuses a secret satisfaction and complacence
through the imagination, and gives a finish to any thing that
is great and uncommon. The very first discovery of it strikes
the mind with an inward joy, and spreads a cheerfulness and
delight through all its faculties."

If, then, this volume has caught, what its Author has so
ardently wished, somewhat of the attraction, and the beauty of
those objects it is intended to pourtray, it needs no higher
praise;---no preface to show its lights:---it will find a way to
every heart that is not inaccessible to the choicest of nature's
gifts.





Zinnia multiflora

2/3



Clematis integrifolia

2/3



Apocynum androsaemifolium



Galardia bicolor

2/3

ZINNIA MULTIFLORA.

RED FLOWERED ZINNIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

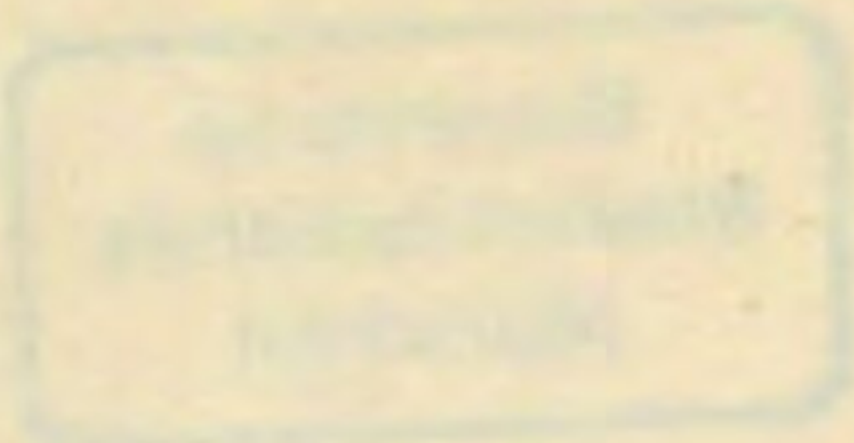
Native of N. America.	Height. 15 inches.	Flowers in June, Sep.	Duration. Annual.	Cultivated in 1763.
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No. 97.

Zinnia is a name instituted by Linneus, and given to this genus, in honour of Dr. John Godfrey Zinn, professor of physic and botany at Gottingen; a disciple of Haller, and author of several botanical treatises. Multiflora, from the Latin multi, many; and flores, flowers; which is expressive of its free-blooming habit.

The very name multiflora pronounces this well-known annual a desirable appendage to the parterre. Though its blossoms possess less brilliancy of colour than many others, the quantity of them, and particularly their duration, will amply compensate for the deficiency in comparison with most of the annual visitants of the gay flower garden.

The seeds of Zinnia multiflora should be sown about the latter end of March; and if planted in the compartment where they are intended to flower, the soil should be made light and fine; though if too sandy and dry, the plants will not be luxuriant. It will generally prove advantageous to raise them on a weak hotbed, and transplant them into the borders in showery weather, when the plants are about two inches high.



XINZIA, MULLIO-RA.

RED FLOWERED XINZIA.

POLYDAMIS SUPREMA

2nd Year Old

Native of	Height	Flowers in	Duration	Collected
15 inches	12 inches	June, Sept.	Annual	in 1893

No. 67.

Xanzia is a name invented by Linnaeus, and given to this genus in honor of Dr. John Gualtero Xanzia, physician of physics and botany. Gualtero was a disciple of Hales, and author of several botanical treatises. Mullio-RA, from the Latin mullus, murex; and flowers, flowers; which is expressive of its free blooming habit.

The very same nightingale pronounced this well-known annual a desirable ornamental to the garden. Though for its some flowers, but brilliancy of color than many others, the quantity of them and persistence of their duration, will amply compensate for the deficiency in comparison with most of the annuals of the ray flower garden.

The seeds of Xanzia mullio-RA should be sown about the latter end of March; and if planted in the compartments where they are intended to flower, the soil should be made light and free; though if too much and dry, the plants will not be luxuriant. It will generally prove advantageous to raise them in a well heated, and transparent glass into the borders of a pot, or in a box, when the plants are about ten inches high.

From Kew, N. S. W.

CLEM'ATIS INTEGRIFO'LIA.

INTIRE-LEAVED VIRGIN'S BOWER.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of Austria.	Height. 2 feet.	Flowers in June, Aug.	Duration. Perennial.	Cultivated in 1596.
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No. 98.

Clematis is derived from the Greek *KLEMA*, a vine, or little twig; in allusion to the greater portion of this genus being climbers, like a vine. *Integrifolia*, from the Latin *integer*, intire; and *folium*, a leaf; the leaves being intire, that is undivided, or without any opening or gash on their edges.

The various species of Clematis, above twenty in the whole, are chiefly exotic climbers, and several of them well known. England has only one native species, the *Clematis vitalba*, or Traveller's Joy, with which most of our readers are, doubtless, well acquainted. The *Clematis integrifolia* has a plumose seed, similar to the English one, which latter Gerard notices, and observes 'Each seed has a fine white feather fastened to it, which maketh, in the winter, a goodly show.'

The stems of the *Clematis integrifolia* are annual, and unlike the greater part of the same family, are low, requiring only to be supported against the effects of wind and rain. The roots may be divided in the autumn, or early in the spring, and may be planted in any common garden soil. They require no peculiar attention to aspect or soil.

Hort. Kew. 2, v. 3, 346.

APOCYNUM ANDROSÆMIFOLIUM.

TUTSAN-LEAVED DOG'S-BANE.

Class. PENTANDRIA. *Order.* DIGYNIA.

Natural Order.
APOCYNÆ.

Native of N. America.	Height. 3 feet.	Flowers in July, Sep.	Duration. Perennial.	Cultivated in 1688.
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No. 99.

The generic term, Apocynum, is deduced from the Greek ΑΠΟ, from; and ΚΥΝΟΣ, a dog; by reason of its possessing, or, at least, having been supposed to possess, some peculiar qualities that take from these animals their vital functions. Androsæmifolium, from androsæmum, an old name applied to a species of Hypericum, commonly known as the Tutsan; and folium, a leaf; in allusion to the similarity of their foliage.

This is an extremely pretty herbaceous plant, having somewhat the appearance of an under-shrub; and producing an abundant display of delicate pendulous flowers, during the latter part of the summer.

It has not been much employed in medicine, though it appears, from the testimony of several American physicians, to possess active qualities. Professor Kalm, in his travels into North America, notices its properties as inoffensive to some persons; whilst to others it proved so noxious that the milky juice of the plant produced blisters on their hands, which he says was the case with one individual who merely plucked the flower from its stem in order to show it him.

In some parts of America it is called Ipecac, from its power of acting upon the stomach; but its emetic qualities are far less active than Ipecacuanha. Dr. Bigelow conceives, that whatever emetic properties it possesses, arises from its bitterness; as most vegetable bitters produce such effects, when administered in a dose too large for the patient.

‘The flowers of the *Apocynum* have a power of catching flies and small insects, which was ascribed by Dr. Darwin, to an irritability of the internal organs. Mr. Curtis, in the *Botanical Magazine*, has considered this subject at large, and ascribes the property to its true cause. In consequence of the close convergency of the anthers and their adhesion to the stigma, a narrow fissure or slit exists, which becomes more contracted at the top. The insect, in search of the honey at the bottom of the flower, inserts its proboscis between the stamens, into the cavity within them. In extricating it from this situation, the proboscis is sometimes caught in the fissure, and in proportion to the efforts made by the insect to escape, it becomes more closely wedged in the upper part of the slit, so that its deliverance by its own powers, becomes at length impracticable.’

The *Apocynum androsæmifolium* may be increased by dividing the plants in March; but as the young offsets frequently shoot some distance, underground, without producing much fibre, care should be taken to obtain those that are best supplied with fibrous roots. It should be planted in a light dry soil; but after transplanting, should be regularly watered till it has struck root.

Hort. Kew. 2, v. 2, 73.

GAILLARDIA BICOLOR.
TWO-COLOURED GAILLARDIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA FRUSTRANEA.

Natural Order.
CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Carolina.	18 inches.	Aug. Sep.	Perennial.	in 1787.

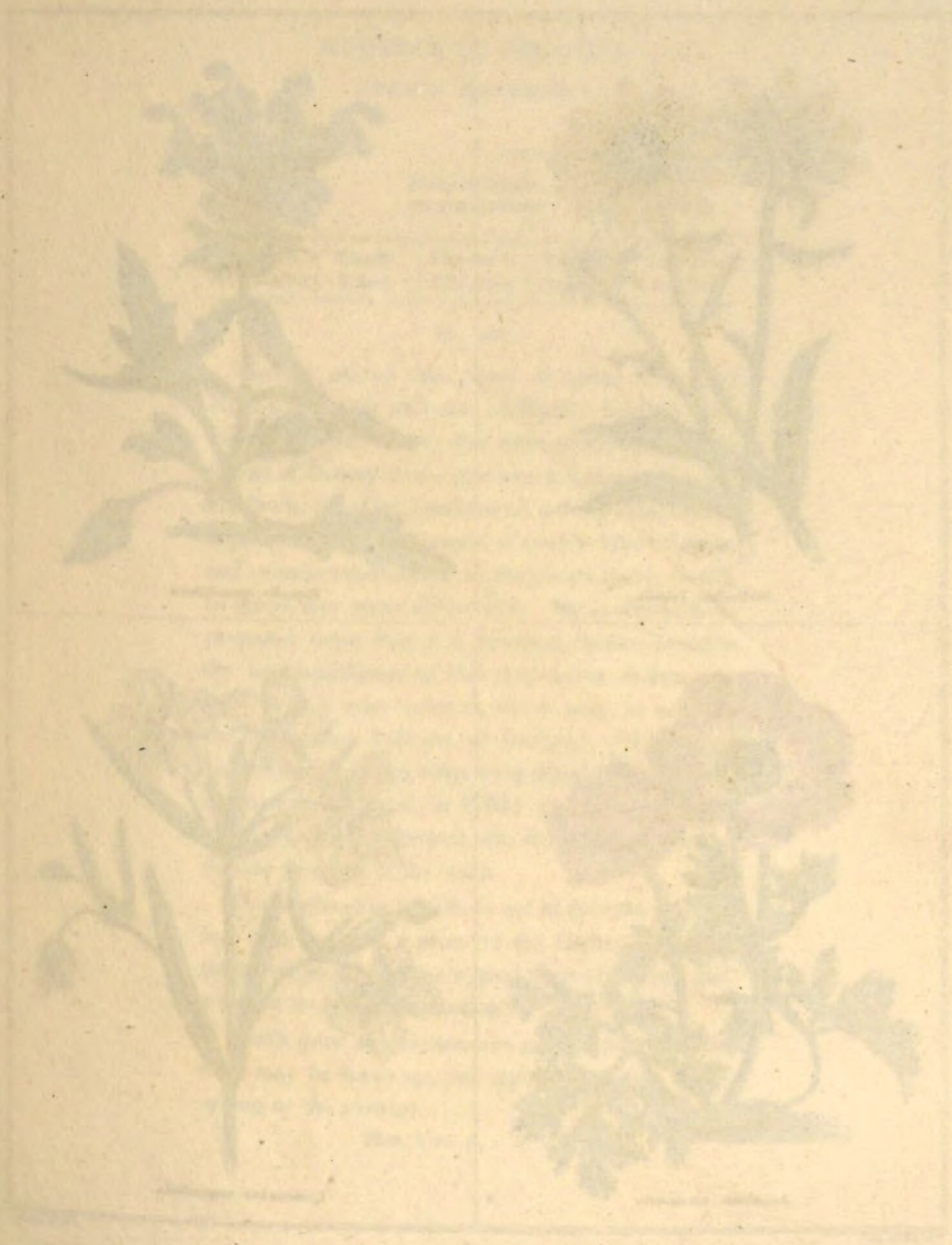
No. 100.

The name of M. Gaillardia, a French gentleman of Charrentonneau, was chosen to represent this genus. Some botanists, doubting this individual's claim to such distinction, have called it *Virgilia helioides*. It is better known by the former appellation; and a name once adopted, should exhibit stronger grounds of impropriety, than appears in the present instance, before a change be admitted. The botanist needs but a distinct term to represent a family of plants; though certain it is, that if an appellation, indicative of a property or peculiarity, common to all the individuals of such family, could be adopted, very evident advantages would result from such nomenclature.

The trivial name *bicolor*, given to this species, is borrowed from the Latin, in allusion to its flowers being two-coloured. Some varieties will be met with which show two colours more distinctly than ours, by their having an orange-red circle round the bottoms of the petals.

This beautiful plant may be increased by a division of its roots, or by seeds. It should be planted in a rich soil, and warm situation.

Hort. Kew. 2, v. 5, 129.





Rudbeckia fulgida

26



Prunella grandiflora



Anemone coronaria

26



Lysimachia angustifolia

RUDBECKIA FULGIDA.

FULGID RUDBECKIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA FRUSTRANEA.

Natural Order.
CORYMBIFERÆ.

Native of N. America	Height. 2 feet.	Flowers in July, Aug.	Duration. Perennial.	Introduced in 1760.
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No. 101.

Linneus named this genus of plants after Olof Rudbeck, father and son, of Upsal; both of them men of brilliant talent; who were, successively, Professors of Botany there, previous to Linneus himself. Rudbeck, the elder, commenced a work, *The Campi Elysii*, which was to consist of twelve folio volumes, and contain wood-cuts of all the plants in the world, as far as they were discovered. He is said to have prepared more than ten thousand figures towards the accomplishment of this stupendous design, and two volumes were printed, which may be seen in the Sherardian Library of Oxford. Of the first volume, three copies only, were saved from the destructive fire at Upsal, in 1702; which, it is greatly to be regretted, destroyed also the materials for the further progress of the work.

The *Rudbeckia fulgida* is not of delicate foliage, but well deserves a place in the herbaceous compartment, as it produces a good show of flowers, and requires no peculiar attention.

It will grow in any common garden soil; and the roots may be taken up, and separated, either in the spring or the autumn.

PRUNELLA GRANDIFLORA.

GREAT-FLOWERED SELF-HEAL.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	6 inches.	Aug. Sept.	Perennial.	in 1596.

No. 102.

The term *Prunella* appears, according to Gerard, to have been deduced from the less harmonious one, *Brunellen*; a name adopted by the Germans, because the plant cured a disorder which they call *DIE BRUEN*, an inflammation of the throat and mouth. *Grandiflora*, from the Latin, great-flowered. The appellation, self-heal, doubtless, arose from some supposed virtues, which modern herbalists have not been able to verify.

This plant has, formerly, been noticed as a variety of our English *Prunella vulgaris*, and we decidedly believe it to be so; though, by some late botanists, it has been considered a distinct species. It is altogether more handsome than our indigenous one.

Villars observes, that a drier soil seems, amongst other changes in the plant, to occasion it sometimes to produce white flowers.

It is low and suitable for the front of the flower border, and requires no peculiar care. It may be increased by a division of the roots, in autumn or spring, and may be planted in any common garden soil. Sometimes it produces seeds, from which young plants may be propagated by spring sowing.

Hort Kew. 2, v. 3, 429.

PRINELLA GRANDIFLORA

GREAT-FLOWERED SELF-BEAT

China. DISTRIBUTION
 Natural Order. DISTRIBUTION
 LABIATAE

Native of	Height	Flowers in	Duration	Collected
Asia	6 inches	Aug. Sept.	Perennial	in 1866

No. 107

The term *Prinella* appears, according to Gerard, to have been deduced from the less harmonious one, *Brunella*; a name adopted by the Germans, because the plant cured a disorder which they call *die Bruck*, an inflammation of the throat and mouth. *Grandiflora*, from the Latin, great-flowered. The appellation, self-beat, doubtless, arose from some supposed virtue, which modern botanists have not been able to verify.

This plant has, formerly, been noticed as a variety of our English *Prinella vulgaris*, and we decidedly believe it to be so; though, by some late botanists, it has been considered a distinct species. It is also rather more handsome than our indigenous one.

Villars observes, that a dry soil seems, although other changes in the plant, to occasion it sometimes to produce white flowers.

It is now and entitled for the front of the flower border, and requires no peculiar care. It may be increased by a division of the root, in autumn or spring, and may be planted in any common garden soil. Sometimes it produces seeds, from which young plants may be propagated by spring sowing.

Herb. Kew. 2, v. 3, 1825.

ANEMONE CORONARIA.

POPPY ANEMONE.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Levant.	9 inches.	Feb. to May	Perennial.	in 1596.

No. 103.

Anemone is derived from the Greek ANEMOS, wind; as Gerard says, after Pliny, because "the flower doth never open itself but when the wind doth blow." As this is not quite correct, at least with the Anemones of our days, the appellation is supposed to have arisen on account of their flourishing in exposed and windy situations.

The term coronaria, from the Latin corona, a crown, or garland, appears to have been adopted in consequence of the use the ancients made of these flowers in forming such ornaments.

The ancient fabulists ascribe to this flower a very high birth. They tell us that Venus, in her grief for the death of Adonis, mingled her tears with his blood, and thence sprung the first Anemone.

The Poppy Anemone is well calculated for the general flower garden, is of easy cultivation; and being raised from seeds, which yield flowers of innumerable varieties of tint, pleasures are continually excited by the anticipation of new and superior beauties; such as may well induce the poet to exclaim

'See! yon anemones their leaves unfold,
With rubies flaming, and with living gold.'

Our present limits will not admit an extended detail of the mode of culture, practised by professional florists, for raising those peculiar beauties of fancy, known as prize flowers; but, at a future period, a portrait of a high-titled prize beauty shall be taken, and the subject treated accordingly.

The downy seed of Poppy Anemones should be first divided, by being rubbed amongst sand. It is usually directed to be sown in August, but to avoid the requisite trouble of winter protection, we prefer sowing it at the end of February. This may be done in boxes or pots of rich light soil, which should be immediately placed within the frame of a moderately warm cucumber bed, there to remain at least three months. They may afterwards be removed to a cool situation, and require to be carefully freed from weeds, as the plants will remain exceedingly small during the first three or four months of their growth. The soil should be kept tolerably damp from the time of sowing; and when the plants attain half an inch in height they will begin to grow more freely. In September, the little tuberous roots should be transplanted into beds of light rich loamy soil, moderately dry, having an open situation, and a free blossom may be expected very early in the spring, and some will be produced even in the depth of winter.

Pure air is indispensable. Having failed in procuring a good blossom in a town garden, we planted roots in pots in a more pure air, and when in healthy flower, removed them into a town atmosphere, but their luxuriance quickly declined.

When the leaves die, the roots may be taken up, and be replanted in September.

Hort. Kew. 2, v. 3, 338.

LYSIMACHIA ANGUSTIFOLIA.

NARROW-LEAVED LOOSE-STRIFE.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of N. America.	Height. 1 foot.	Flowers in July, Aug.	Duration. Perennial.	Introduced in 1803.
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No. 104.

The name of this genus, according to Pliny, is derived from a military general, named Lysimachus, who acted under Alexander the Great, and was afterwards king of Thrace. The term Lysimachus is of Greek origin, and our English appellation Loose-strife, or Peacemaker, is a literal translation of it. We may reasonably suppose that the great general we have named, inherited the name without its qualities, unless his biographers have done him much injustice. Angustifolia is formed from the Latin angustus, narrow ; and folium, a leaf.

This pretty species of Loose-strife, being of rather late introduction, is by no means common, and is well worthy a place in the general flower garden.

About one-half of the known species of Loose-strife are, like the present, North American ; and we intend, at a future period, noticing one peculiar species, the *Lysimachia stricta* ; which, unlike the others, propagates itself by bulbs, produced at the axils of the leaves.

The narrow-leaved Loose-strife may be increased by a division of the roots in spring. The soil should not be very sandy or dry.

Michaux Flora Boreali-Americana.

ALBISIA ALBA

LEUCOMELIS ALBA

... ..

Height	15000 ft.	15000 ft.
Length	15000 ft.	15000 ft.

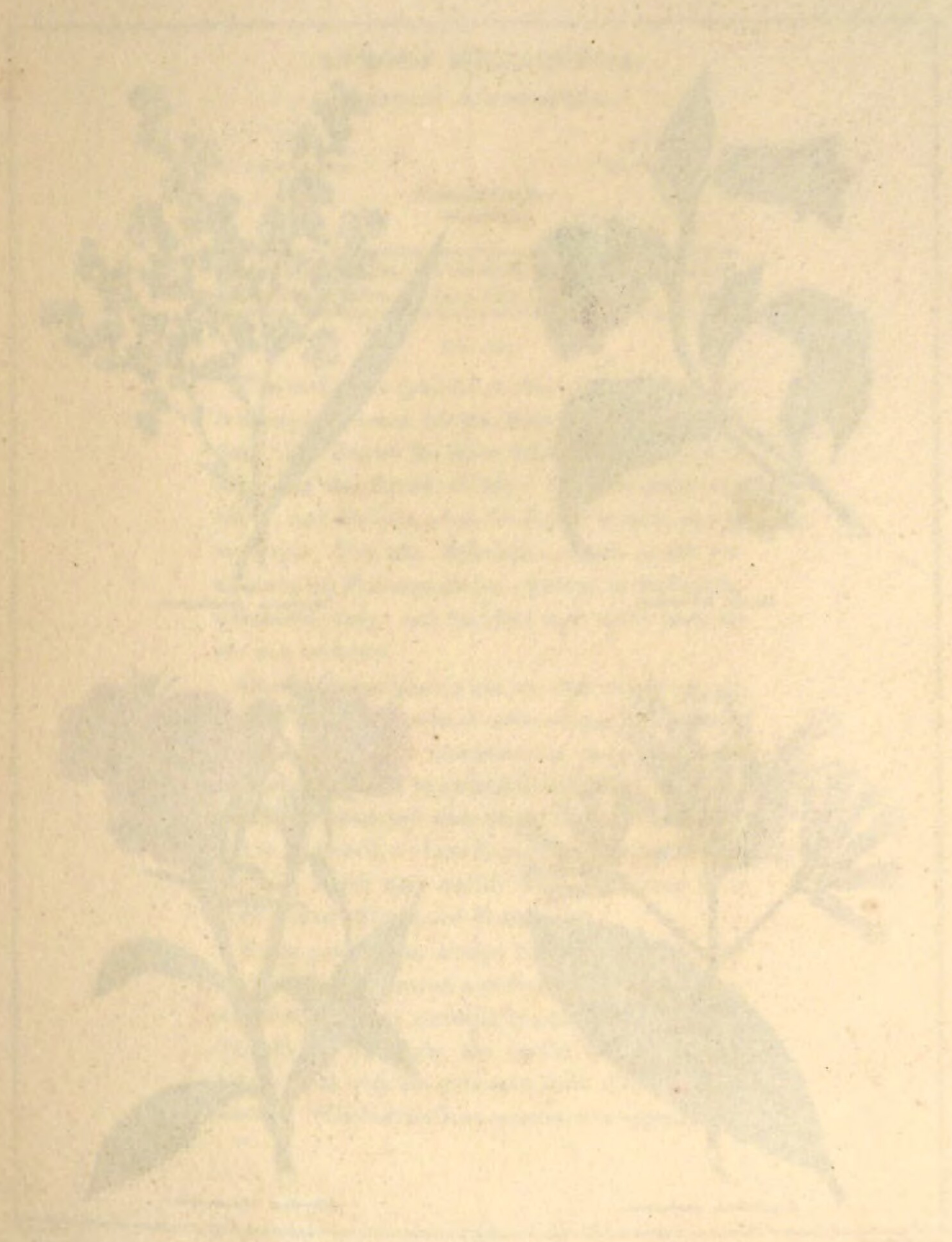
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The name of this genus, according to Poir., is derived from a military general, named Lysimachus, who acted under Alexander the Great, and was afterwards king of Thrace. The term Lysimachus is of Greek origin, and our English appellation Lysimachus, or Pansimachus, is a literal translation of it. We may reasonably suppose that the great general we have named, inherited the name without its pretensions, unless the historians have done him much injustice. Agrostis is derived from the Latin agrostis, narrow; and folium, a leaf.

This pretty species of Agrostis, being of rather late introduction, is for the most part common, and is well worth a place in the general flower garden.

About one-half of the known species of Agrostis are native of the present North American; and we intend, at a future period, noticing one peculiar species, the Agrostis spicata; which, unlike the others, propagates itself by bulbous, produced at the ends of the leaves.

The narrow-leaved Agrostis may be increased by a division of the roots in spring. The soil should not be very sandy, and the water should be abundant.





Atropa belladonna.

75



Polygonum divaricatum.



Eupatorium maculatum.



Dianthus Hispanicus.

76

ATROPA BELLADONNA.

DEADLY NIGHTSHADE.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
SOLANEE.

Native of Britain.	Height. 5 feet.	Flowers in June, July.	Duration. Perennial.	Inhabits Hedges.
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No. 105.

The malignant qualities of this plant obtained for it the appellation of Atropa, from Atropos, the third fate. The first of the three fates, Clotho, is said to draw out the thread of life; Lachesis turns the wheel; and Atropos, when the thread is spun, cuts it in twain. The title Belladonna, which is still retained in the Pharmacopœias, signifies, in the Italian, a handsome lady; and the plant is so called from its use as a cosmetic.

Our present subject is not one that we expect our readers will be desirous of cultivating. We present it, indeed, under the impression of an opposite opinion, that they will be careful to avoid it. Any information connected with plants that are dangerous and to be feared, we have thought possessing an importance which may qualify their appearing in a work where utility is not disregarded.

Every part of the Atropa belladonna, or Deadly Nightshade, has proved a malignant poison. Some one or other of our senses is in general, most providentially for us, made the herald of approaching danger; but with the poisonous fruit of this plant it is not so. The berries bear an attractive appearance,

and to the smell and taste they are in no degree repugnant. In consequence of these circumstances, children have very frequently fallen victims to their deleterious effects; the plant should, therefore, be known, that it may be wholly eradicated from exposed situations.

The Belladonna is supposed to have been the plant which the Roman soldiers, urged by hunger, ate in the Parthian war. Plutarch tells us, that on this occasion it produced loss of the memory and senses; and that the unfortunate victims to it, were prone to move every stone that they met with, as though in some important pursuit; till, ultimately, the poison subdued their strength, and they died.

Buchanan also relates, that the Scots mixed the juice of this plant with the food which they supplied to the Danes, their invaders. It had an intoxicating effect, and the Scots became their destroyers.

Under the influence of this poison the sensibility of the stomach is greatly decreased, and emetics lose much of their usual power. The stomach pump, and sulphate of zinc, should be first resorted to; vinegar, afterwards, in copious draughts, is recommended for relieving the system from the effects of the poison.

Mr. Brandes, in his recent chemical researches, analyzed this plant, and obtained a crystalized product, which he calls atropia; but the malignant vapour generated during the process, obliged him to relinquish his experiments on it.

Its medicinal properties, used both externally and internally, have been found efficacious in cancerous and scrophulous sores and tumours.

Hort. Kew. 2, v. 1, 392.

POLYGONUM DIVARICATUM.

DIVARICATED POLYGONUM.

Class.
OCTANDRIA.

Order.
TRIGYNIA.

Natural Order.
POLYGONEÆ.

Native of Siberia.	Height. 2 feet.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1759.
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No. 106.

Polygonum is derived from the Greek *POLU*, many; and *GONU*, a knee, knot, or joint, on account of the numerous knotted joints upon most of the plants comprised in this genus. *Divaricatum*, from the Latin *divarico*, to spread or stand out wide. The term *divaricate*, in botanical language, is usually applied to branches which form an obtuse angle with the stem.

The present species of Polygonum is an interesting plant, though it does not possess the gaiety or the stature of the better-known annual of the same family, the Polygonum orientale, or Tall Persicaria. In the mixed parterre of herbaceous plants it yields an elegant variety, and prettily contrasts with the more glaring colours of various species of Coreopsis, Epilobium, Phlox, Lilium, &c. which produce their flowers at the same period.

It will flourish in any common garden soil, and requires very little attention. As it increases pretty freely at the roots, it is readily multiplied by a separation of them; and this operation may be performed with equal success in the autumn or spring, but the latter season should be preferred.

Hort. Kew. 2, v. 2, 419.

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EUPATO'RIUM MACULA'TUM.

SPOT-STALKED EUPATORIUM.

Class.
SYNGENESIA.

Order.
POLYGAMIA ÆQUALIS.

Natural Order.
CORYMBIFERÆ.

Native of N. America.	Height. 5 feet.	Flowers in Aug. Sept.	Duration. Perennial.	Cultivated in 1656.
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No. 107.

The term Eupatorium appears to have entered the botanical nomenclature at a very early period, and was established in honour of Mithridates, King of Pontus, surnamed Eupator. He was a man of great learning, but of insatiable ambition; which passion he cherished by the most malignant tyranny, exercised against the Romans and other powers. He is said to have been skilled in medicine, and a composition, now common in the apothecary's shop, still bears his name. Mithridate's prescription was verified by Damocritus, hence the same medicine is indiscriminately called after either individual. Maculatum, from the Latin, signifying spotted.

Many of the plants belonging to this family, are known by the name of hemp-agrimony, and the present one has sometimes been called spotted hemp-agrimony, a name by which it will be recognised by many of our readers. It is a handsome herbaceous plant that may be advantageously classed with tall annuals, from its season of flowering.

A division of its roots may be made for the purpose of increase, at the usual season; and no peculiar care will be required in its cultivation.

Hort. Kew. 2. v. 4, 507.

EUPATORIUM MACULATUM

SPOT-STEMMED EUPATORIUM

Class. EUPATORIACEAE
Order. ROTIFLORES
Natural Order. COMPOSITAE

Height 5 feet	Flowers in large whorls	Flowers in whorls	Flowers in whorls
W. America	W. America	W. America	W. America

No. 107

The term Eupatorium appears to have entered the botanical nomenclature at a very early period, and was established in honor of Minerva, King of Pontus, renowned Eupator. He was a son of Zeus, brother of Hestia, and of the other gods, who, according to the most ancient tradition, were placed against the Titans and other powers. He is said to have been killed in battle, and a temple, now known to the antiquaries, was built near his tomb. Minerva's patronage was attributed by Democritus, hence the name Eupatorium is indicated, or called after other individuals. The culture, from the Latin, signifies growth.

Many of the plants belonging to this family are known by the name of hemp-grass, and the present one has sometimes been called spotted hemp-grass, a name by which it will be recognized by many of our readers. It is a handsome plant, roots from the seed, and is very hardy.

A division of the roots may be made for the purpose of commerce, at the same time; and no particular care will be required in its collection.

Herb No. 107

DIANTHUS HISPANICUS.

SPANISH PINK.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLÆ.

Native of Spain.	Height. 1 foot.	Flowers in July, Sept.	Duration. Perennial.	Cultivated in 1820.
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No. 108.

Dianthus, or Jove's Flower, is deduced from the Greek DIOS, of Jove; and ANTHOS, a flower. Hispanicus, from Hispania, the ancient name of Spain, whence this plant has been imported.

At No. 65, of this work, the Dianthus Chinensis was given, and the same observations will, in many particulars, equally apply to both species. This is of more robust growth than the Chinese species, and in appearance more nearly approaches the Dianthus barbatus, or Sweet William; but contrary to the habits of both these species, its seedlings never vary in colour.

If the general character of the Spanish and China Pinks were, in different degrees, incorporated in the same plant, some beautiful varieties would certainly be produced; and from their apparent affinity, we have no doubt but this may be easily effected by a little attention; and probably by merely planting them together, so that the farina of the one would be carried to the styles of the other.

It may be sown in rich light soil, in March or April, and the young plants bear transplanting, if required. It will continue two or three years.

DIANTHUS BIPARTITUS

FRANCIS PICKER

Order
Dianthus

Order
Dianthus

Botanical Order
Dianthus

Height	Stems	Leaves	Flowers
1 foot	1-2	1-2	1-2

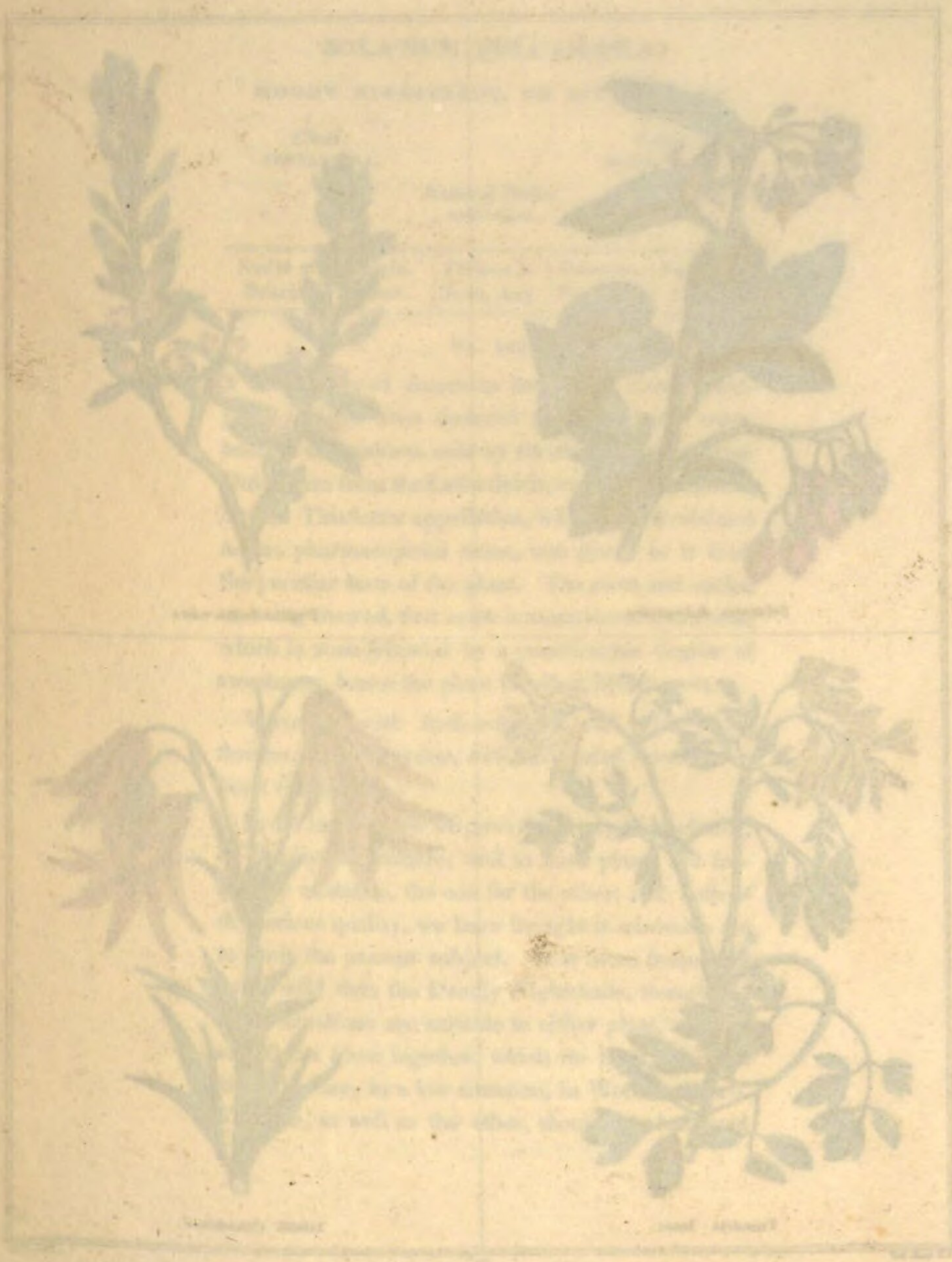
No. 100

Dianthus or *Jacob's Flower*, is derived from the Greek word, *dianthos*, and a synonym, *flower*. This is probably from *Hesperis*, the evening name of *Spina*, where this plant has been imported.

At No. 62, of the west, the *Dianthus Chinensis* was given, and the same observation will in many particular apply to both species. This is of more robust growth than the Chinese species, and in specimens more nearly approaches the *Dianthus barbatus* of *Stewart Wilson*; but contrary to the habits of both these species, the seedlings never are in colour.

If the general character of the *Spina* and *Chinensis* plants were in different degrees, I might have been able to give some more detailed remarks on the subject; but from their opposite effects, we have no doubt that this case is easily solved by a little attention; and probably by merely placing them together, so that the colour of the one would be carried to the style of the other.

It may be seen in this light, that in *Spina* or *April*, and the young plants have transplanted, it repeated. It will compare two or three years.





Solanum dulcamara.

36



Daphne tarton-raira



Fumaria lutea.



Lilium Canadense.

37

SOLA'NUM DULCAMA'RA.

WOODY NIGHTSHADE, OR BITTERSWEET.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
SOLANÆ.

Native of Britain.	Height. 6 feet.	Flowers in June, Aug.	Duration. Perennial.	Cultivated. in 1629.
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No. 109.

Solanum is of uncertain derivation, though supposed to have been deduced from the Latin solor, because it produces ease by its stupifying qualities. Dulcamara from the Latin dulcis, sweet; and amarus, bitter. This latter appellation, which is still retained as the pharmacopœial name, was given to it from the peculiar taste of the plant. The roots and stalks, on being chewed, first cause a sensation of bitterness, which is soon followed by a considerable degree of sweetness; hence the plant is called Bittersweet.

Varieties, with flesh-coloured, and with white flowers; and others also, with variegated leaves, have been cultivated.

In our last number we gave the Atropa belladonna, or Deadly Nightshade; and as these plants are frequently mistaken, the one for the other, and both of deleterious quality, we have thought it advisable not to omit the present subject. It is more frequently found wild than the Deadly Nightshade, though similar situations are suitable to either plant, as they sometimes grow together, which we have observed to be the case, in a low situation, in Worcestershire. The one, as well as the other, should be destroyed

wherever we might expect children to discover the berries, which prove inviting, from their resemblance to red currants. Thirty of these berries being given to a dog, he died in the space of three hours; and, upon his stomach being opened, the berries were discovered to have undergone no change by the powers of digestion; there can, therefore, be little doubt of their poisonous effects.

Notwithstanding the danger incurred by an improper use of this plant, yet, employed medicinally with discretion, we have numerous authorities in support of the benefits resulting from its virtues; particularly in rheumatism, jaundice, scrophula, and scorbutic affections. It is generally said to increase all the secretions and excretions; to excite the heart and arteries; but its effects seem to differ, according to the nature of the soil where it grows, being most efficacious from dry soils.

Linneus observes, that few medicines are better adapted to afford relief in acute rheumatism, inflammations, and fevers. Boerhaave recommends it as a sweetener of the blood and juices; and Bergius, also, mentions its virtues in the cure of land scurvy, and other cutaneous diseases. Haller notices a case of cancerous ulcer of the breast being cured by the application of its juice and leaves.

In the London Pharmacopœia, the decoction is directed to be made, by adding an ounce of the sliced stalks, to a pint and a half of water, and boiling it down to a pint. The dose there ordered, is half an ounce to an ounce, three times a day; this may, however, in general, be gradually increased to a much larger quantity.

Hort. Kew. 2, v. 1, 397.

DAPHNE TARTON-RAIRA.

SILVERY-LEAVED DAPHNE.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
THYMELÆÆ.

Native of France.	Height. 18 inches.	Flowers in May, June.	Duration. Perennial.	Cultivated in 1640.
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No. 110.

Daphne is the Greek name of the laurel, to which a few of this genus bear some affinity.

Previous to the Linnean arrangement, Tartonraira was the principal name by which this plant was known. According to Gerard, it originated with the French, from its rarity. He says, "Tartonraire, called in English, Gutwoort, which groweth by the sea, and is catharticall, not of any long continuance among vs, and a stranger, very goodly to beholde, and therefore in the moother toong of the Massilians, is called Tartonraire."

The young plants are frequently kept in pots, for the purpose of being conveniently removed without danger; for it is observed, that transplanting cannot always be effected without injuring, or wholly destroying them. Seeds are sometimes obtained from abroad, and although autumn is the proper season for sowing them, it is advisable, generally, to sow them immediately on their arrival, in a dry, sheltered situation, where the plants are intended to remain. In the following summer they should be kept perfectly free from weeds, and have occasional waterings or shade, as may be observed to be requisite.

Hort. Kew. 2, v. 2, 409.

FUMARIA LUTEA.

YELLOW-FLOWERED FUMATORY.

Class.
DIADELPHIA.

Order.
HEXANDRIA.

Natural Order.
PAPAVERACEÆ.

Native of Britain.	Height. 1 foot.	Flowers in May, Sept.	Duration. Perennial.	Cultivated in 1629.
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No. 111.

The derivation of the name of this genus, which has been noticed under No. 69, has not been ascertained with complete certainty. The Latin fumus, smoke, is usually considered its origin, as it is said, from its affecting the eyes. Lutea, from the Latin luteus, yellow.

The genus Fumaria, as established by Linneus, has been, by some authors, much divided, on account of the diversity of its seed vessels: and our present plant will be found, in a few works, as the *Corydalis lutea*. Its other synonyms will be rarely met with. If it were our province here to enter into a detailed statement of the botanical distinctions, divisions, and arrangements, which the genus Fumaria has undergone, a small portion of the requisite matter would far exceed our limits.

This is a lively herbaceous plant, that continues in flower during great part of the summer; will multiply itself spontaneously, by seed; and ornament old walls and rock-work with advantage, and almost independently of the efforts of a cultivator. No peculiarity of soil or situation is requisite for its successful growth.

Hort. Kew. 2, v. 4, 240.

PUNARIA LUTEA.

YELLOW-POWERED PUNARIA.

Color.
PUNARIA

Color.
PUNARIA

Natural Order.
PUNARIA

Native of	Height.	Flowers in	Duration.	Collected
India.	1 foot.	May, Sept.	Perennial.	in 1818.

No. 111

The derivation of the name of this genus, which has been noticed under No. 66, has not been ascertained with complete certainty. The Latin name, *anake*, is usually considered its origin, as it is said, from its affecting the eyes. *Anake*, from the Latin *anake*, yellow.

The genus *Punaria*, as established by Linnaeus, has been, by some authors, much divided, on account of the diversity of its seed vessels; and our present plant will be found in a few works, as the *Caryophyllus*. The other synonyme will be rarely met with. If it were our province here to enter into a detailed statement of the botanical distinctions, divisions, and arrangements, which the genus *Punaria* has undergone, a small portion of the requisite matter would far exceed our limits.

This is a lively herbaceous plant, that continues in flower during great part of the summer; will multiply itself spontaneously, by seed; and ornament old walls and rock-work with red-tinted, and almost independently of the efforts of a cultivator. No peculiarity of soil or situation is requisite for its successful growth.

West. Flor. 2, v. 4, 240.

LILIUM CANADENSE.

CANADIAN LILY.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
LILIÆ.

Native of N. America.	Height. 3 feet.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1629.
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No. 112.

Lilium, from the Greek LEIRION, a lily. The Greek LEIOS, handsome, is supposed to have been the origin of LEIRION, as the name of an attractive eastern plant. Canadense, from Canada, that part of North America where it is indigenous.

No tribe of flowers has excited greater interest than the magnificent assemblage that is usually comprehended under the denomination of liliaceous plants. It should be observed, this not only includes such as are strictly called Lilies, or even those belonging to the same natural order, agreeably to prevailing systems, but also many others, chiefly bulbous or tuberous rooted, with flowers of a similar formation. When our Saviour said, "that even Solomon, in all his glory, was not arrayed like one of these;" he is not supposed to have alluded to any plant we now call a Lily, but to the splendid Amaryllis lutea, a liliaceous one, with which the fields of Palestine, in the autumn, are said, profusely to glitter.

Its offset bulbs may, occasionally, be taken for increase, and the best period for their removal is soon after the leaves are dead. They should never be removed when in a growing state.

Hort. Kew. 2, v. 2, 243.

LILY CANADENSE

CANADIAN LILY.

Order.
MONOCOTYLEDONALES

Class.
MONOCOTYLEDONALES

Western Canada.
1878

Native of	Height	Flowers in	Flowers in	Collected
N. America	3 feet	July, Aug.	September	in 1878

No. 117.

Lilium, from the Greek *lailon*, a lily. The Greek *lailon*, however, is supposed to have been the origin of *Lilium*, as the name of an extensive eastern plant. *Canadense*, from Canada, that part of North America where it is indigenous.

Number of flowers has excited greater interest than the scientific nomenclature that is usually comprised under the denomination of *Lilium* plants. It should be observed, that not only include such as are strictly called *Lilium*, or even those belonging to the same natural order, according to prevailing system, but also many others, chiefly bulbous or tuberous rooted, with flowers of a similar formation. When our florist said, "that even *Salmon*, in all his glory, was not raised like one of these," he is not supposed to have alluded to any plant we now call a lily, but to the splendid *Anemone* *lilium*, a *Lilium* *canadense*, with which the habits of *Salmon*, in the autumn, are said, probably to differ.

Its effect perhaps may, occasionally, be taken for its crown, and the best period for their removal is soon after the leaves are dead. They should never be removed when in a growing state.

West Hill, N. Y., 1878.





Gentiana Catesbaei



Xeranthemum annuum

3/4



Dahlia superflua

2/4



Mimulus lutea

7/5

GENTIANA CATESBÆI.

CATESBY'S GENTIAN.

Class.
PENTANDRIA.

Order.
DIGYNIA.

Natural Order.
GENTIANEÆ.

Native of N. America.	Height. 1 foot.	Flowers in June, July	Duration. Perennial.	Introduced in 1803.
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No. 113.

The name of Gentius, king of Illyria, gave rise to the appellation Gentiana. A species of it is said to have been discovered by him, and used as a cure for the plague which infected his army. Catesby, whose name distinguishes this beautiful species, was an eminent English naturalist, who spent the greater part of his time, between 1712 and 1726 in America; industriously employing himself in the collection of various subjects connected with each department of natural history. On his return to England, he published his splendid work, "The Natural History of Carolina;" a performance which amply testifies the wide range of his pursuits.

This elegant herbaceous plant, though not exhibiting the intensity of colour which some of the gentians possess, is deservedly admired, and should occupy a prominent place in every collection.

It should be planted in a rich loam, mixed with a little peat; and as its stems are altogether low and neat, it may be placed near to the front of the parterre. An increase may be obtained by separating the roots; but to procure a good show of flowers, this should not be done too frequently.

GEOMETRICAL OPTICS

GEOMETRICAL OPTICS

Author: J. H. VAN VLIET
Editor: J. H. VAN VLIET

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No. 111

The purpose of this book is to provide a comprehensive treatment of the subject of Geometrical Optics. It is intended for use as a text book in a course of instruction in this subject, and also as a reference work for those who are interested in the subject. The book is divided into two parts. The first part deals with the general principles of Geometrical Optics, and the second part deals with the application of these principles to the design of optical instruments. The book is written in a clear and concise style, and is illustrated with numerous diagrams and figures. It is hoped that this book will be found useful and interesting to all who are interested in the subject of Geometrical Optics.

First Edition, 1911

XERANTHEMUM AN'NUUM.

ANNUAL XERANTHEMUM.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of S. Europe.	Height. 18 inches.	Flowers in July, Aug.	Duration. Annual.	Cultivated in 1658.
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No. 114.

Xeranthemum is deduced from the Greek **XEROS**, dry; and **ANTHOS**, a flower; in reference to its dry and durable qualities. These circumstances have procured for it the name of Everlasting, by which it is not unusually known.

When this flower is quickly dried, it retains its shining pink or purple colour; and as it greatly assists in the formation of a winter bouquet, it is rendered a desirable object of cultivation. For this purpose the flowers should be gathered soon after they expand, and 'the back of every coloured scale of the calyx should be drawn, while fresh, over the edge of a blunt knife, to keep the flower open after it is dried.' The beautiful hue which they possess, in the shops of seedsmen, is not always the entire effort of nature. They are exposed to the vapour of an acid; this heightens the colour of the usual variety, which is somewhat tinged with purple, to a brilliant pink hue.

The finest flowers are generally produced by sowing the seeds on a dry border, in the autumn. Early spring sowing, in a rich soil, will, however, be found perfectly to succeed.

Hort. Kew. 2. v. 5, 20.

DAH-LIA SUPER-FLUA. *purpurea plena.*

DOUBLE PURPLE DAHLIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of Mexico.	Height. 6 feet.	Flowers in Aug. Oct.	Duration. Perennial.	Introduced in 1789.
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No. 115.

This genus, which now forms so prominent a feature amongst our autumnal gaieties, was named in honour of Andrew Dahl, a botanist of Sweden. Willdenow objected to the term, under an erroneous impression that it had previously been appropriated to another genus; and adopted the name Georgina; but he has not been followed by subsequent writers. Others objected to it from its similarity to Dalea, a genus already established, after our countryman, Dale. The name Dahlia is now, however, so well confirmed, that it may bid defiance to the caprice of modern botanical name-changers. It is, notwithstanding, very desirable that attention be paid to the proper pronunciation of the word. The A should have the open sound, as in father; it will then be clearly distinguishable from the older name, Dalea.

The genus is now divided into two species only, the superflua and frustranea; in allusion to the florets of the rays of the former abounding in seed, whilst those of the latter species are barren. Other specific distinctions were first adopted, but were found unstable; and from the variable character of seedlings, the present may not prove constant.

These splendid plants are natives of Spanish ~~A~~me-rica, and though noticed by the Spaniards, about the middle of the seventeenth century, did not attract much attention till they had flowered at Madrid, in 1790, when Cavanilles described them in the first volume of his *Icones*, published in the following year. In 1802, he sent plants to Paris, where they were successfully cultivated by Monsieur Thouin; who, shortly afterwards, published coloured figures and a description of them. The first introduction of the Dahlia into England was, according to the *Hortus Kewensis*, by the Marchioness of Bute, in 1789, but the plants, it may be presumed, were soon lost. In 1802 and 1803, others were sent from Paris; and in 1804, seeds from Madrid; yet, for several years, they were scarcely heard of amongst us. Their habits being unknown, their increase was slow; whilst on the continent, innumerable and splendid varieties were produced; so that after the peace, in 1814, they were poured upon us in all the variety of their present tints; exciting the astonishment of every beholder, and the joy of those who could number such beauties in their own collections. Since that time they have been rapidly increased and improved; and England can now boast of superb varieties.

Seedlings flower in the first season. Roots should be taken up on the approach of frost, and be kept in sand, in a cellar, till the beginning of April; when they may be divided, for replanting; but a portion of the old stem, to secure part of the crown, should be retained to each division. Permit one shoot only to grow for flowering. Cuttings, planted in a shaded situation, grow very readily.

Hort. Kew. 2, v. 5, 87.

MIMULUS LUTEUS.

YELLOW-FLOWERED MONKEY-FLOWER.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of America.	Height. 15 inches.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1812.
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No. 116.

The term *Mimulus* is one borrowed from classic authors, and assigned, by Linneus, to this genus. It is derived from *Mimus*, the name of a masked actor, amongst the Romans; and alludes to the form of the corolla. This shape is botanically described by a comparison with the human mouth, and is called ringent or gaping. The English appellation, Monkey-flower, has undoubtedly been suggested by the same term and circumstances.

This is an extremely showy herbaceous plant, with very succulent stems, peculiarly adapted to low moist places, where it flourishes abundantly; and even in such situations, is not destroyed by the severest frosts. It is very suitable for ornamenting the edges of ponds or rivulets; or it may be planted on a damp shady border, or amongst rock-work. If it be planted in pots of soil, and then immersed in water to the rims of the pots, it will grow luxuriantly, and make a handsome appearance, either alone, or placed amongst the more perfectly aquatic subjects.

It may be increased by the division of its roots, in spring or autumn, and needs no peculiarity of soil; but a rather moist situation.

Loudon's Ency. of Pl. 528.



Symphoria racemosa.

36



Zizyphus pahirus.



Scabiosa atropurpurea.

37



Chrysanthemum Sinense.

38

SYMPHORIA RACEMOSA.

SNOWBERRY.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAPRIFOLIÆ.

Native of N. America	Height. 4 feet.	Flowers in July, Sept.	Duration. Perennial.	Introduced in 1817.
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No. 117.

The generic appellation of this delicate deciduous shrub is intended to express its habits of producing closely clustered bunches of fruit, a correct idea of which is best obtained from an inspection of the accompanying figure. It was formerly called *Symphoricarpos*, from the Greek *SUMPHOREO*, to heap together; and *CARPOS*, fruit. *Racemosa*, from the Latin; significant of its numerous clusters.

This elegant plant will properly assist in adorning the foreground of the shrubbery; or it may still be more advantageously shown, in separate small bushes, scattered over the lawn, or in breaking the tameness of an open grassplot. Here its beautiful slender branches will spontaneously spring from the roots, and gracefully bending under the weight of their snowy white berries and second crop of flowers, form an object of no small attraction.

It is easily increased by laying the suckers, which are produced in abundance; or, indeed, by a separation of them, as they soon put out fibrous roots, and admit of being parted. It is sometimes raised from seeds, but the practice is comparatively tedious, and offers no advantage in return.

WYMPHORIA RACEMOSA

ENDWHERRY.

Order

RUSSULOIDEAE

Class

FRUITING

Natural Order

HYMENOGASTRACEAE

Number of Fruit	Height in feet	Flowers in July, Sept.	Fructification in 1817
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No. 117

The generic appellation of this distinct mushroom
which is here obtained from an individual of the
companying figure. It was formerly called *Boletus*
characterized from the Greek *summunus*, to keep
together; and *carpus*, fruit - *summunus*, from the
Latin; significant of its numerous clusters.

This elegant plant will properly exist in nature
for the foreground of the landscape, as it may still
be more advantageously shown, as it is very small
indeed, scattered over the lawn, as a delicate
tint of an open landscape. It is very beautiful
when crowded with numerous spring from the
trunk and growing in bunches under the rays of
their sunny white berries and second crop of fruit
are, from an aspect of no small attraction.

It is easily increased by laying the sections, which
are produced in abundance; or, indeed, by sowing
them in the soil, as they soon put out filaments, and
admit of being raised. It is sometimes raised from
seed, but the practice is comparatively tedious and

requires much labour in culture.

See page 111.

ZIZYPHUS PALIURUS.

CHRIST'S THORN.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHAMNEÆ.

Native of S. of Europe	Height. 8 feet.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1596.
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No. 118.

The origin of the term *Zizyphus* has been referred to words of a similar construction in several eastern languages, but with no degree of certainty; and the derivation of *Paliurus* is equally obscure.

This plant, by different authors, has been ranked in the genera *Paliurus*, *Rhamnus*, and *Zizyphus*; and now is again divided from the latter genus, and forms a new one under the title *Paliurus Australis*, a name first adopted by Gærtner. On the authority of the *Hortus Kewensis*, *Botanical Magazine*, and general usage, we retain it as *Zizyphus paliurus*.

It is indigenous to all the country of Judea, as well as the southern parts of Europe; and is generally supposed to have furnished the crown of thorns by which our Saviour was tormented and reviled; and the pliability of its slender branches renders this by no means improbable; though some have thought the prickly acanthus was employed.

From the resemblance of its singular seed vessels to a head, and broad brimmed hat, the French call it *porte chapeau*.

It may be propagated from cuttings; or from seeds, obtained from abroad.

Hort. Kew. 2, v. 2, 18.

NIXYPHUS PALMER.

CHRIST'S THORN.

Order
Hymenoptera

Family
Cecropidae

Subgenus
Nixypus

Native of	Height	Flowers in	Flowers in
W. of Europe	5 feet	June, July	August, in fruit

No. 118

The origin of the term Nixypus has been referred to words of a similar construction in several languages, but with no degree of certainty; and the derivation of Palmer is equally obscure.

This plant, by different authors, has been ranked in the genera *Palmeria*, *Palmeria*, and *Nixypus*; and now is again divided from the latter genus, and forms a new one under the name *Palmeria*. On the authority of the *Hortus Kewensis*, *Botanical Magazine*, and *General Catalogue*, we retain it as *Nixypus*.

It is indigenous to all the country of India, as well as the western parts of Europe; and is generally supposed to have furnished the crown of thorns by which our Saviour was crowned and crucified; and the probability of its slender branches rendering this by no means improbable; though some have thought the highly sensitive was employed.

From the resemblance of its slender and weak to a beard, and hence named that the French call it *poivre chepen*.

It may be propagated from cuttings; or from seeds obtained from abroad.

From Kew, v. 1, p. 18

SCABIOSA ATROPURPUREA.

SWEET SCABIOUS.

Class.
TETRANDRIA.

Order.
MONOGYNIA.

Natural Order.
DIPSACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Unknown.	3 feet.	July, Sept.	Biennial.	in 1629.

No. 119.

Though the name of the present genus is not of great antiquity, it is rather uncertain from what it originated. Some of the species are said to have been formerly held in esteem for their virtues in the cure of cutaneous diseases; and that Scabiosa was therefore derived from scabies. Others say that as roughness is characteristic of the tribe, it was derived from scaber, rough. Atropurpurea, from the Latin ater, dark; and purpurea, purple.

From the fine deep colour of its star-studded flowers, and the sweet musky odour with which they abound, it cannot be surprising that it is very well known. It sometimes sports into variegated and delicate colours, and also becomes proliferous, as the Hen-and-chicken daisy, varieties which render it not the less pleasing.

Authors are not agreed respecting the country whence it was first brought to England, though there is little doubt but that it is a native of some of the southern parts of Europe.

If its seeds be sown as late as the end of May, the plants will stand better than if raised earlier, and will blossom strongly in the following summer.

Hort. Kew. 2, v. 1, 228.

SCABIOSA ATROPURPUREA.

SWEET SCABIOUS.

Order
DIPSACACEAE

Class
DIPSACACEAE

Native of
Europe

Native of	Height	Flowers in	Flowers	Calculated
Europe	2 feet	July, Sept.	divers	is 1000

No. 110

Though the name of the present genus is not of great antiquity, it is rather uncertain from what it originated. Some of the species are said to have been formerly held in esteem for their virtue in the cure of cutaneous diseases; and that Scabiosa was therefore derived from scabies. Others say that its roughness is characteristic of the tribe, it was derived from scaber, rough. Atropurpurea, from the Latin atrop, dark; and purpurea, purple.

From the deep colour of its star-shaped flowers, and the sweet musky odour with which they abound, it cannot be surprising that it is very well known. It sometimes sports into variegated and delicate colours, and also becomes prostrata, as the Italian children say, variation which renders it not the less pleasing.

Authors are not agreed respecting the country whence it was first brought to England, though there is little doubt but that it is a native of some of the southern parts of Europe.

If its seeds be sown as late as the end of May, the plants will stand better than if raised earlier, and will show more strongly in the following summer.

Heat New S. 1. 178

CHRYSAN'THEMUM SINEN'SE.

CHINESE CHRYSANTHEMUM.

Class.

SYNGENESIA.

Order.

POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFERÆ.

Native of China.	Height. 4 feet.	Flowers in Sept. Nov.	Duration. Perennial.	Cultivated in 1790.
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No. 120.

Chrysanthemum, from the Greek CHRUSOS, gold; and ANTHOS, a flower. Sinense, from Sinæ, the ancient inhabitants of a part of China.

The numerous and beautiful varieties of the present species will be found in many modern works as the Chrysanthemum Indicum, a name given by Linneus, to a smaller species; and as Anthemis artemisiæfolia, after Willdenow, in some others.

The magnificent assemblage of Chinese Chrysanthemums, now in England, is chiefly of late introduction. It comprises numerous shades of yellow, red, purple, and white; with a variety of tints that form connecting links between these more definite hues. Also flowers of various formation; some quilled, and some flat petalled, double and semi-double, full-opening and tasselled; so that fifty or sixty distinct varieties are now enumerated.

Though these autumnal beauties are sufficiently hardy to bear our winters, and will sometimes blossom well in sheltered situations, still they are far better calculated for pot-culture; thus they may be conveniently removed into a hall, or other place of shelter from early frosts, which otherwise, owing to

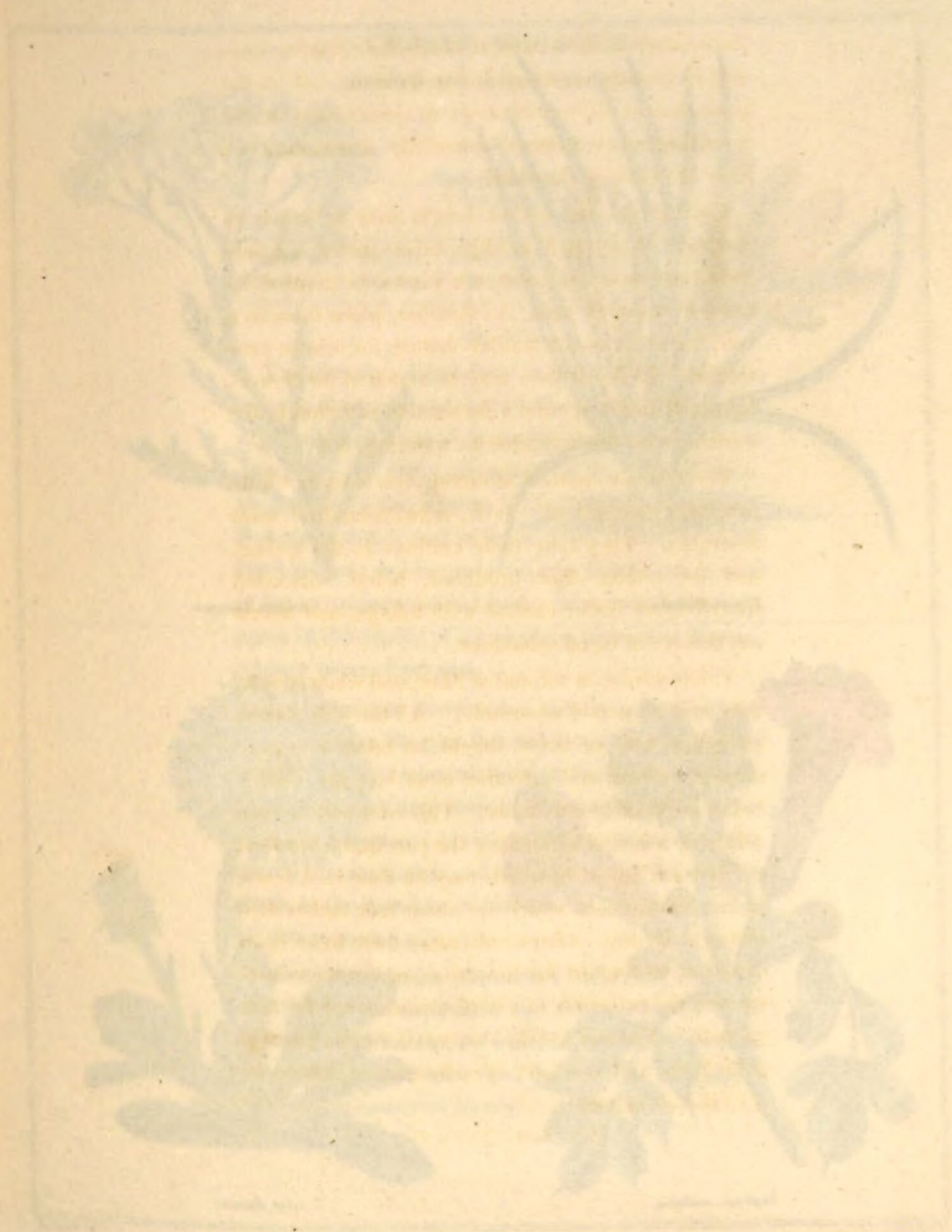
the lateness of the season at which their flowers open, will frequently occasion disappointment. With the protection of the conservatory or greenhouse, whilst flowering, they become splendidly ornamental till near the close of the year.

Cuttings of six inches length may be taken in August. They will readily strike under a hand-glass, and may, in about six weeks, be planted separately in small pots. In October, place them in a cold frame, or under similar shelter, for winter protection. In April they may be repotted for flowering, and should occupy a favourable situation in the garden, with due attention to watering, &c.

The Chinese method of culture has been but little practised amongst us. It is, notwithstanding, most desirable. They take their cuttings in the spring, and the plants, thus produced, being somewhat dwarfed, are better clothed with foliage, and throw out flowers of equal splendour.

Take cuttings at the end of May, and when struck, they may be potted separately. All the side shoots, excepting two or three, should be taken off, as in autumn culture, and attention must be paid to their being kept sufficiently moist. This care will be considerably lessened by sinking the pots in the borders, till they are repotted, which may be done in August, in No. 32 size pots, which are about four inches diameter at the top. Afterwards, place them in an open situation, to remain for flowering, unless the season dictates the propriety of giving them shelter for that purpose. The soil usually employed, is two parts of fresh loam, and one part of well-decayed leaves or old hot-bed manure.

Hort. Kew. 2, v. 5, 95.





Crocus Susianus.

72



Achillea Clavenae.

73



Bignonia radicans.

74



Aster alpinus.

75

CROCUS SUSIANUS.

CLOTH OF GOLD CROCUS.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDEE.

Native of	Height.	Flowers in	Duration.	Cultivated
Turkey.	5 inches.	March.	Perennial.	in 1605.

No. 121.

The Greek philosophers used the term Crocus three or four centuries before the christian era ; and it is believed, applied it to the same plant that we now apply it. Ovid has a story of the youth Crocus, changed into this flower. The name also occurs in Solomon's Song ; and in the English version is translated saffron ; but it appears likely that Solomon used it for an aromatic of the East. Susa was the ancient name of the capital of the western district of Persia, whence comes Susianus.

There are few flowers that meet a more welcome reception than the glowing and beautiful varieties of crocuses. They come as the first fruits of those life-yielding rays, whose absence has taught us the value of their presence : those cheering sunbeams that spread plenteousness and luxury on the face of the earth, at the mandate of him "Who giveth us richly all things to enjoy."

There are curious phenomena exhibited in many flowers, by the expansion and contraction of their parts of fructification, by which means they are protected from wind and rain, the dews of the night, and similar causes of injury.

The Crocus is constantly influenced by atmospheric changes, and may also be acted upon in a similar manner by artificial means. The following results arose out of experiments to which we submitted the yellow crocus in the spring of last year.

The flowers having been gathered at night, when their corollas were perfectly closed, were placed at the distance of nearly a yard from two lighted candles, and in a temperature of 50 degrees of Fahrenheit's thermometer. In this situation and warmth, they remained two hours; but their petals remained nearly closed.

Other flowers were gathered at the same time, and being entirely excluded from light, were submitted to a warmth of 95 degrees; the temperature being very gradually raised from 65. Their continuance, during two hours, in this situation, occasioned but very little change in them.

Others were also gathered, and placed between two lighted candles, at about four inches from each, and in a temperature of 70 to 75 degrees. These flowers, in rather less than an hour, were as fully expanded as in the midday sun.

We notice these little experiments, not for their value, but that such of our young readers as possess opportunity, may be induced to pursue these researches to a greater length. In such an unbounded extent of divine wisdom and wonder as the vegetable world exhibits, almost every thing remains to be discovered. Though trifling our efforts at the commencement, they may lead to important results; and no one should lose an opportunity of exploring the wonders that surround him.

ACHILLEA CLAVENNÆ.

SILVER-LEAVED MILFOIL.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	6 inches.	June.	Perennial.	in 1656.

No. 122.

The name of Achilles, the famous hero of Greece, supplied the origin of the name of this genus. He is said to have acquired some knowledge of botany, from his master Chiron; and to have used the plant first called Achillea, for the cure of wounds and ulcers.

This beautiful herbaceous subject is not only valuable for its delicate white corymbs of flowers, but also for its silvery foliage, which tends so much to embellish the parterre. Being a low and unobtrusive plant, it should be placed near to the front of the compartment. Or it may be planted on the summit of a mount; which will not only favour the display of its beauty, but also, by keeping its roots dry, prove very conducive to its health.

The Achillea clavennæ, when growing in a situation that is suitable to its habits, will increase rapidly, and the roots may be divided in the spring to promote further produce. It should be planted in a warm situation, and a light dry soil; to which a little peat and sand might be added, as it will greatly encourage its growth. It should be moulded up in the first autumn after planting, and taken up, divided, and replanted in the succeeding year.

Hort. Kew. 2, v. 5, 111.

ACQUAINTANCE

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BIGNONIA RADICANS.

ASH-LEAVED TRUMPET FLOWER.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
BIGNONIACEÆ.

Native of N. America.	Height. 20 feet.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1640.
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No. 123.

The name of this genus, *Bignonia*, was established by Tournefort, in honour of the Abbé Bignon. *Radicans*, from the Latin *radicatus*, rooted; in allusion to the habit of this species of *Bignonia*, in producing fibrous appendages, similar to roots, from the joints of its stems. Thus, as a climber, is this plant supported, by its growth up the trunks of trees, to a great height. Miller says, to the height of forty or fifty feet. When trained up brick walls, these fibres will generally insinuate themselves even into the mortar joints of the building.

The splendid panicles of flowers produced by this fine climbing shrub, are particularly attractive; and where a wall of south or south-east aspect offers itself, for the support of such a plant, this should constitute one of its embellishments.

It is usually propagated by layers, which should be taken off in about twelve months from the time of their being put down. It will be advisable, early in every spring, to cut back the stems very considerably, particularly those which are of rather weak growth; by which treatment, luxuriant young shoots will be produced, that will flower freely.

Hort. Kew. 2, v. 4, 33.

WIGONIA MADAGASCARICA

WIGONIA MADAGASCARICA

WIGONIA MADAGASCARICA
WIGONIA MADAGASCARICA
WIGONIA MADAGASCARICA

W. Madagascar	Height of Flowers	Flowers in July-Aug.	Flowers in August	Flowers in September
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No. 193

The name of this genus, Wigonia, was established by Tournefort in honour of the Abbe Wigonia. It is distinguished from the other members of the genus, in the habit of this species of Wigonia, in producing flowers appendages, similar to roots, from the joints of the stem. These are a climbing plant, in the habit of growing by its growth up the trunk of trees to a great height. It is said to be the height of forty or fifty feet. When trained up, it will bear three times as much fruit as when it is left to grow in the wild. The species is produced by the same seed, and the fruit is very abundant, and when a well of water or a small stream is near it, it will grow up to the top of the tree, and will be found in the fruit of the tree. The species is produced by the same seed, and the fruit is very abundant, and when a well of water or a small stream is near it, it will grow up to the top of the tree, and will be found in the fruit of the tree.

It is usually propagated by layers, which should be taken off in about twelve months from the time of their being put down. It will be ready to set in every spring, to cut back the stems very considerably, particularly those which are of rather weak growth; by which treatment, the plant will grow more freely, and will be found in the fruit of the tree.

Wigonia Madagascar

ASTER ALPINUS.

ALPINE ASTER.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of Alps of Eu.	Height. 8 inches.	Flowers in May, June.	Duration. Perennial.	Cultivated in 1658.
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No. 124.

The present genus is named after the Greek **AS-TER**, a star; which is readily explained by the radiated flowers of this family. **Alpinus**, from the Latin, belonging to the Alps.

That class of herbaceous plants, usually denominated Alpine, form a most interesting portion of the florist's care. Though humble in their growth, the flowers of many of them are conspicuous and beautiful; and our present subject truly belongs to this denomination. It is extremely hardy, and should be planted where its beauty is not likely to be concealed by taller plants; on an open part of the border, or on artificial rock-work. It will flourish exceedingly, if submitted to pot culture; and the protection of the cold frame, during winter, will occasion it to flower somewhat earlier than in the borders.

A light loamy soil is very suitable to this species; and though its flowers will continue somewhat longer, in a shady situation, still the plant receives no injury by full exposure to the midday sun. It may be increased by a separation of the roots, which is best performed in the spring. It should be protected from slugs, or they will sometimes destroy it.

Hort. Kew. 2, v. 5, 49.

ASTER ALPINE

ALPINE ASTER.

Class. *Compositae*.
 Order. *Portulacaceae*.
 Natural Order. *Compositae*.

Height of Alps of the	Height of the	Flowers in the	Flowers in the	Collected in 1852.
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No. 194

The present genus is named after the Greek *aster*, a star; which is readily explained by the distinct flowers of this family. *Alpinus*, from the Latin, belonging to the *Alps*.

This class of herbaceous plants, usually denominated *Alpines*, form a most interesting portion of the *Alps*' flora. Though humble in their growth, the flowers of many of them are conspicuous and beautiful; and our present subject truly belongs to this class. It is extremely large, and should be planted where its beauty is not likely to be concealed by other plants; on an open part of the border, or on artificial rock-work. It will flourish exceedingly, if subjected to pot culture; and the protection of the cold frame, during winter, will occasion it to flower somewhat earlier than in the border.

A light sandy soil is very suitable to this species; and though its flowers will continue somewhat longer in a shady situation, still the plant receives no injury by full exposure to the midday sun. It may be increased by a separation of the roots, which is best performed in the spring. It should be protected from slugs, or they will sometimes destroy it.

Her. Kew. 2, v. 6, 49.



Scilla bifolia.

2/3



Schizanthus porrigenus.



Saxifraga oppositifolia.



Silene fimbriata.

3/4

SCILLA BIFOLIA.

TWO-LEAVED SQUILL.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
ASPHODELEÆ.

Native of Britain.	Height. 9 inches.	Flowers in Mar. April.	Duration. Perennial.	Inhabits Woods.
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No. 125.

Scilla is derived from a Greek word of similar formation, and is supposed to have been originally applied to our Scilla maritima. Bifolia, from the Latin bis, twice; and folium, a leaf.

This is an extremely pretty little bulbous-rooted native plant. It is one of a numerous family, some of which, by cultivation from seed, sport freely into varieties. It can hardly escape notice, that bulbs more frequently depart from their natural character, and run into variety of forms and colours, than do the other grand divisions, the tuberous and fibrous rooted plants. This is evident from a view of the Hyacinth, Tulip, and Narcissus families. The facility with which bulbs fly from their originals, and their extended powers of reproduction, is a subject worthy attention, and which we shall take an early opportunity of noticing.

The Scilla maritima, or officinal Squill, has been long and deservedly esteemed as an expectorant, but we are not aware of our present subject possessing any peculiar medicinal virtues.

The bulbs, being in a dormant state through the summer, may then be taken up and transplanted.

SCINIA BIFOLIA

TWO-LEAVED SCUTILLA

Class. *Scutellaria*
 Natural Order. *Scutellariaceae*
 Distribution. *Common*

Height. 3 inches.	Flowers in. 12-15.	Leaves. 12-15.
Stems. 12-15.	Flowers. 12-15.	Leaves. 12-15.

No. 120.

Scilla is derived from a Greek word of similar formation, and is supposed to have been originally applied to some Scilla maritima. It differs from the latter in its leaves; and indeed, a leafy Scilla is an extremely pretty little bulbous-rooted plant. It is one of a numerous family, of which the cultivated flower seed, spent frequently in gardens. It can hardly escape notice, that Scilla more frequently depart from their natural character, and run into variety of form and colour, than do the other grand divisions, the tuberoses and fibrous rooted plants. This is evident from a view of the flower, the leaf, and the various families. The plant with which Scilla is often confounded, and which is distinguished by its power of reproduction, is a species of Scilla, which is distinguished by its power of reproduction, and which is distinguished by its power of reproduction. The Scilla maritima, or official species, has been long and deservedly celebrated as an expectorant, and is now one of our most useful remedies. The Scilla maritima is a common plant in a domestic garden, and is distinguished by its power of reproduction.

Bot. Kew. 2. 2. 181.

SCHIZANTHUS PORRIGENS.

SPREADING SCHIZANTHUS.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Chile.	2 feet.	June, Aug.	Annual.	in 1822.

No. 126.

Schizanthus is deduced from two Greek words, SKIZO, to cut; and ANTHOS, a flower; and is applied to this genus in allusion to the deep-cut segments of its corolla. Porrigens, from the Latin, extending or spreading.

This elegant annual has lately joined the gay assemblage of our flower borders. The divaricated and slender growth of its stems, as well as the fugitive delicacy of its flowers, demand a sheltered and shady situation.

Its cultivation is not difficult, though at first we experienced some disappointment in the practice of it. The plants should be raised in pots, in a hot-bed, in the spring, and whilst young they may be divided so as to leave three or four in each. It is particularly requisite, that they be kept moist. The soil should be light, but not too sandy; and if they are afterwards turned into the borders, the situation must be cool and damp, or the entire plants will be dried up and destroyed by the heat of the sun, whilst they are in flower. In pots, this annual forms an extremely elegant appendage to the Hall, or cool window of the Boudoir.

Hooker's Exot. Flor. t. 86.

SCHIZANTHUS PORTULICAE

WINTERING SCHIZANTHUS

CHINA
MOSCOW

CHINA
MOSCOW

WINTERING SCHIZANTHUS

Height in feet	Flowers in Aug.	Distance from to 1000	Distance from to 1000
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No. 120

Schizanthus is derived from two Greek words, *schizo*, to cut; and *anthos*, a flower; and is applied to this genus in allusion to the deep-cut segments of its corolla. Foreigners from the Latin, *extend* or *spreading*.

This elegant annual has lately joined the gay assemblage of our flower borders. The diversified and abundant growth of its stems, as well as the lightness and delicacy of its flowers, demand a sheltered and shady situation.

Its cultivation is not difficult, though at first we experienced some disappointment in the practice of it. The plants should be raised in pots, in a hot-bed, in the spring, and whilst young they may be divided as to leave three or four in each. It is particularly requisite, that they be kept moist. The soil should be light, but not too sandy; and if they are afterwards transplanted into the borders, the situation must be cool and shady, or the entire plants will be dried up and destroyed by the heat of the sun, whilst they are in flower. In pots, this annual forms an extremely elegant appendage to the hall, or cool window of the greenhouse.

London: J. Smith, 1801.

SAXIFRAGA OPPOSITIFOLIA.

OPPOSITE-LEAVED SAXIFRAGE.

Class.
DECANDRIA.

Order.
DIGYNIA.

Natural Order.
SAXIFRAGEÆ.

Native of Britain.	Height. 2 inches.	Flowers in Mar. April.	Duration. Perennial.	Inhabits Mountains.
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No. 127.

It has been noticed, by a celebrated author, that this appellation was given by some old writers to several rock plants, which, by insinuating their roots into the crevices of stones, separate or break them to pieces. This is expressed by the name itself, derived from saxum, a stone; and frango, to break; and the plants in question, were consequently supposed likely to be useful in breaking down the calculus in the human bladder. We meet with few more absurd hypotheses, in the darkest ages of botanical science. Tournefort and Linneus have retained this name for a beautiful genus of herbaceous, principally mountain, plants, to some of which it had been long ago applied; whilst others had been referred to SEDUM. They often occupy the fissures of rocks; so far answering to the original idea of the name before us. Oppositifolia, compounded from the Latin, opposite-leaved.

This species of Saxifrage, in blossom, is extremely attractive, the flowers being strikingly large and showy, in proportion to the plant itself, which is of the humblest growth. As an alpine plant, it may occupy some sheltered and rather shady

situation, on the artificial rock-work of our garden, to which its diminutive size renders it peculiarly well suited. Indeed this sort of wild appendage to the Botanist's domains, should never exhibit any but the most dwarf and humble vegetable subjects.

On the propriety of such formations we may add a few remarks. The adoption of these rugged features is intended to diversify the otherwise tame and general smoothness of the flower garden; for conveniently filling up shady and useless corners; or, for what is far better still, the improved or more natural cultivation of our desert beauties. In either case, their introduction might be perfectly consistent with good taste, but would not the term *Lapideum*, or *Alpine Border*, prove a more consistent title than *Rock-work*? This latter epithet conveys an idea which can rarely be realized by art. On the mere mention of it, the mind immediately recurs to those magnificent diluvian spectacles, the natural and craggy rocks that bound the ocean or flowing rivers, those sports of the deluge, left as a sample of its power and its universality; and when such *WORKS* as these present themselves to the imagination, all will allow how very much, by comparison, is lost to our grandest artificial assemblage of stones. Were we to follow the idea suggested by the name *saxifraga*, a place full of stones might, though less harmoniously, be called a *saxetium*.

Early in every spring, this species should be carefully divided, and planted, either in small pots or on a shady alpine border. A mixture of fresh loam, peat, and a small portion of old mortar, finely sifted, will form for it a suitable compost.

Hort. Kew. 2, v. 3, 68.

SILENE FIMBRIATA.

FRINGE-FLOWERED CATCHFLY.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLEE.

Native of	Height.	Flowers in	Duration.	Introduced
Caucasus.	2 feet.	June, July.	Perennial.	in 1806.

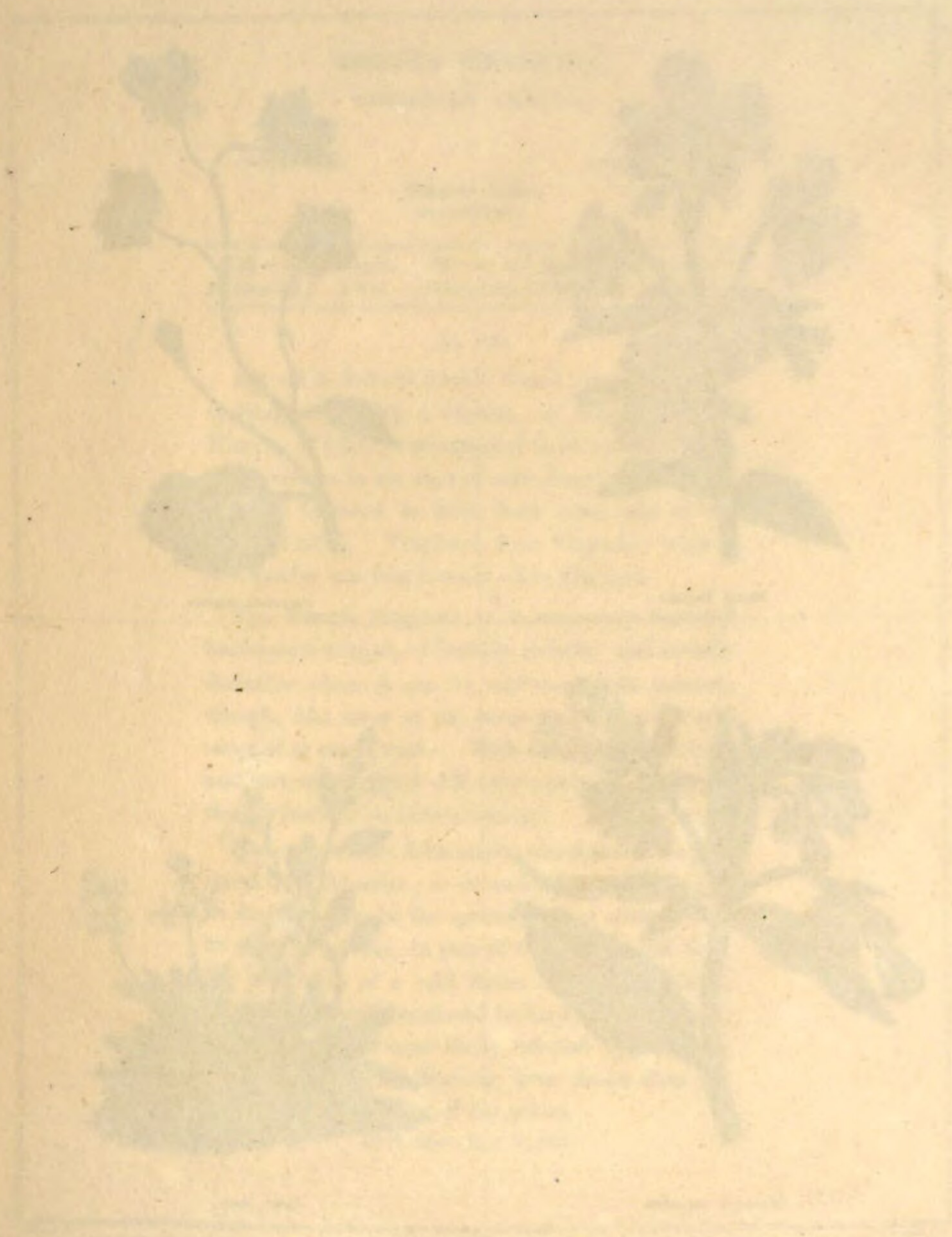
No. 128.

Linneus adopted the term *Silene*, as applicable to this family of plants, from the viscid exudation on the stems, which frequently entraps small flies and other insects. The term is from the Greek *SIALON*, saliva. *Fimbriata*, from the Latin, fringed.

This is rather a strong plant, and its strikingly fringed flowers attract attention, whilst others of more curious formation escape observation. It still, however, has a somewhat homely appearance, from its partial resemblance to others of its tribe, which are well known weeds in almost every meadow or field of sandy or gravelly districts. This is a little drawback on the subject before us. Vulgar or worthless alliances have an influence amongst plants as amongst men, but it is highly requisite that we suffer not our prejudice or caprice to carry away our better judgment. If we examine aright, we shall find very few subjects in the lower orders of creation that merit our contempt, or that justify our wonted neglect of them.

This species of *Silene* is readily raised from seeds, which it freely produces; and they may be sown in the borders where the soil is tolerably light.

Hort. Kew. 2, v. 3, 93.





Rhexia Virginica

25



Campanula carpatica

26



Pulmonaria paniculata



Draba hirta

RHEXIA VIRGINICA.

VIRGINIAN RHEXIA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
MELASTOMÆ.

Native of N.America.	Height. 1 foot.	Flowers in June, July.	Duration. Perennial.	Introduced in 1759.
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No. 129.

Rhexia is derived from a Greek word of similar spelling, signifying a rupture, or fracture. The Rhexia, of Pliny, was supposed to be endowed with many virtues in the cure of such disorders ; but his plant is believed to have been some one of the Alkanet tribe. Virginica, from Virginia ; whence this species was first introduced to England.

The Rhexia Virginica is an extremely beautiful herbaceous subject, of humble growth ; and is truly desirable where it can be cultivated with success ; though, like most of the same genus, it is not well adapted to our climate. With care, it may be kept and increased ; yet it will very rarely flourish as in the lowlands of its native country.

It may be raised from seeds, which should be procured from America ; or its small bulbous roots may be divided early in the spring. The seeds should be sown in autumn, in pots of sandy peat, and have the protection of a cold frame during the winter. In summer, the plants should be kept tolerably moist ; and this will be most easily effected by retaining them in pots, and affording them shade from the sun, in the hottest part of the season.

CAMPA'NULA CARPA'TICA.

CARPATHIAN BELL-FLOWER.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of Carp. Alps.	Height. 9 inches.	Flowers in June, Aug.	Duration. Perennial.	Introduced in 1774.
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No. 130.

This genus of plants has been named from the shape of its monopetalous corolla. A bell, campana in the Latin language, presents a tolerably correct idea of the flower of most of the species, but the present one departs considerably from that conformation; for not only is its shape rather different, but unlike most of the same family, its flowers have not the bell-like pendulous position; still its family connexion is sufficiently marked, and a first glance declares its alliance. Its long succession of flowers renders it very desirable; and though they are not of so specious a character as some others of the same tribe, their numbers make them attractive.

The term, Carpatica, has been used to distinguish this species, from its being a native of the Carpathian Alps; a magnificent chain of mountains, bounding the one side of Hungary, and extending a circuit of about 500 miles.

It is readily propagated, by parting its roots, in autumn or spring; but the latter season is preferable. Where there is a choice of situation, a cool one, that is rather dry, should be adopted; though it will flourish in any common garden soil.

Hort. Kew. 2, v. 1, 345.

CAMPANULA CARPENTHICA.

CARPENTHIAN BELL-FLOWER.

Order.
NOCTURNALIA.

Class.
DIPHYLLIDIA.

Subclass Order.
CAMPANULACEAE.

Height of Calyx tube	Height of flower	Flowers in cymes	Flowers in cymes	Flowers in cymes
1 to 1.5	1 to 1.5	1 to 1.5	1 to 1.5	1 to 1.5

No. 120.

This genus of plants has been named from the shape of its corolla. A bell, compared in the Latin language, presents a tolerably correct idea of the flower of most of the species, but the present one departs considerably from that condition; for not only is its shape rather different, but unlike most of the same family, its flowers have not the bell-like pendulous position; still the family connection is sufficiently marked, and a first glance shows it to be allied. In long succession of flowers renders it very desirable; and though they are not of an exquisite character as some others of the same tribe, their numbers make them attractive.

The term, *Carpentia*, has been used in describing this species from its being a native of the Carpathian Alps; a magnificent chain of mountains, bounding the east side of Hungary, and extending a circuit of about 500 miles.

It is readily propagated, by putting its roots in water or sand; but the latter is preferable. When there is a chain of alpine, a cool one, that is rather dry, should be adopted; though it will flourish in any common garden soil.

The New York Botanical Garden.

PULMONARIA PANICULATA.

PANICLED LUNGWORT.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
BORAGINEÆ.

Native of Hud. Bay.	Height. 9 inches.	Flowers in May, June.	Duration. Perennial.	Introduced in 1778.
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No. 131.

Pulmonaria, from pulmo, the lungs; so called, by ancient writers, because the leaves of the officinal species were thought to resemble the speckled surface of the human lungs. Hence the plant was considered, by the old herbalists, to possess virtues, indicated by that resemblance.

That medicines, for all human ailments, have ever existed in the vegetable kingdom, has long been a prevailing idea. In the middle ages, physic and botanical chemistry were so closely allied, that no professor of the first could be deemed eminent without an extensive knowledge of the latter. The science could not, however, have been entirely founded on the basis of experience, or altogether on rational principles; otherwise the mere exterior appearance of a plant, as in the present instance, or peculiar habit, as in *Saxifraga oppositifolia*, lately noticed, could not have been supposed indicative of an affinity with certain organs, or conceived as pointing them out as antidotes to certain diseases of the human frame.

Divide the roots for increase, but each portion should remain a strong one, or it will not soon recover, so as to blossom freely.

Hort. Kew. 2, v. 1, 293.

DRA'BA HIR'TA.

HAIRY WHITLOW-GRASS.

Class.
TETRADYNAMIA.

Order.
SILICULOSA.

Natural Order.
CRUCIFERÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	3 inches.	May, June.	Perennial.	in 1731.

No. 132.

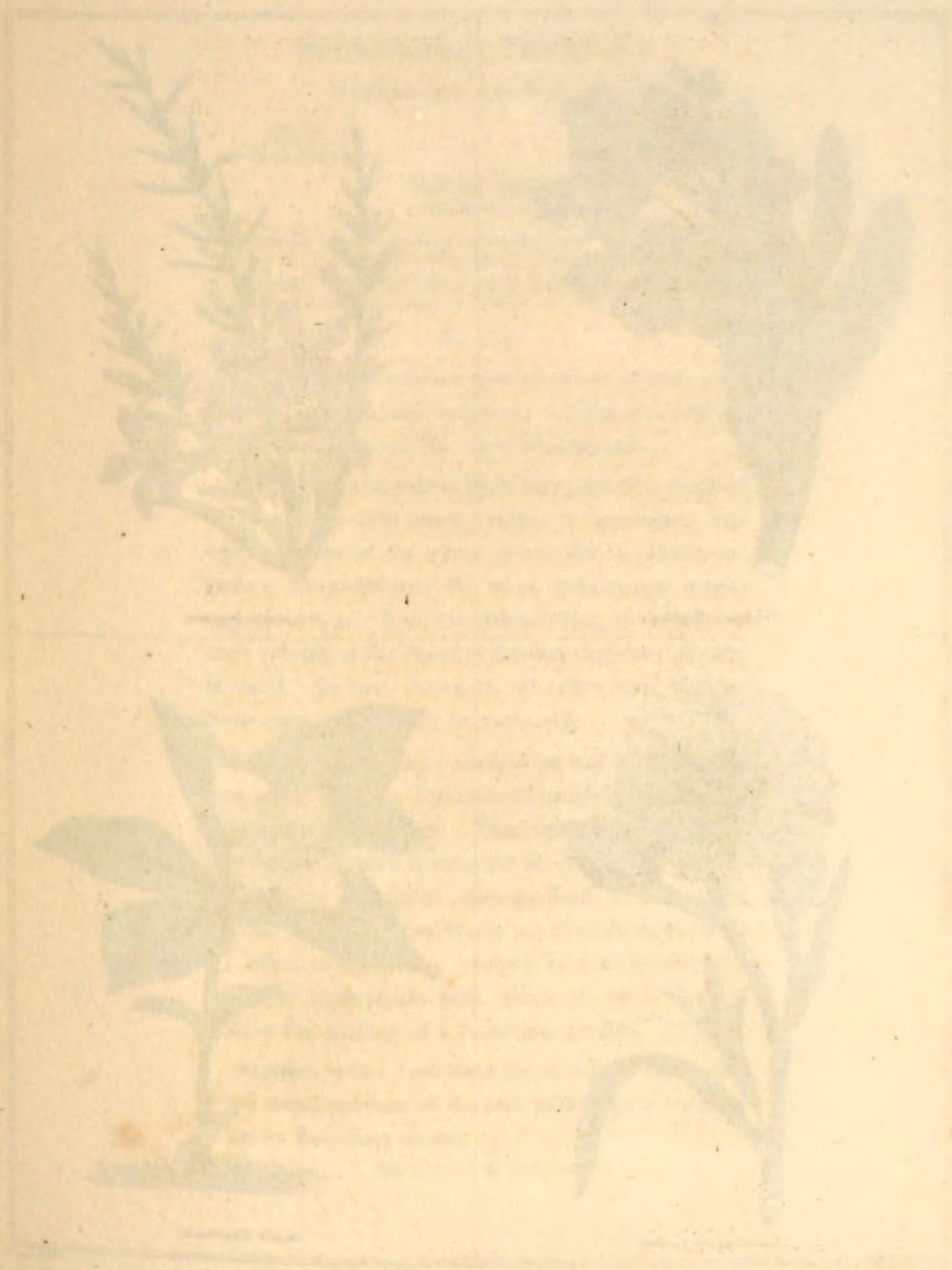
Draba is a Greek word, used by Dioscorides, expressive of an acrid quality ; which quality is possessed, in a considerable degree, by the greater part of this genus. Hirta, from the Latin, implying rough or hairy. The English name of this plant, Whitlow-Grass, like that of our preceding subject, had its origin amongst the simplers of former ages.

There is a considerable variety in this species of Draba, arising, without doubt, in some degree, from the soil and situation of the various parts in which it is found indigenous ; for not only is it a native of Austria, but also of the mountains of Scotland, and of various northern districts of Europe, even as far as the frigid regions of Switzerland and Lapland. The difference of latitude, however, under which various plants are found, is not so much a circumstance to be regarded, as the altitude at which they occur. This, as is observed by the Rev. Mr. Keith, must be obvious from the consideration, that the temperature of any place is affected as much from its altitude as from its latitude. The summit of the mountains of the Andes, even where situate almost under the equator, are yet covered with eternal snow.

Hence it follows, that all variety of climates may exist even in the same latitude, merely by means of the altitude of the place; and consequently, all varieties of vegetable habitat. This was found, by Tournefort, to be literally the case, during his travels in Asia. At the foot of mount Ararat he met with plants peculiar to Armenia; above these he met with plants which are found also in France; at a still greater height he found himself surrounded with such as grow in Sweden; and at the summit, with such as vegetate in the polar regions.

Every one is aware that it has been found impossible to acclimate the great portion of vegetables in this country, which are natives of much warmer parts of the globe, where uninfluenced by extreme altitude. Hence the necessity of the green-house and the stove, to provide for them an atmosphere congenial to their habits. But it is not so generally imagined, that vegetables, derived from regions much colder than our own, require considerable care in their management. It is, however, a fact well known to the admirers of alpine plants, that many of them are exceedingly difficult of culture. It is far more easy to imitate the climate of the torrid, than the frigid, zone.

In their native situations, alpine plants live, during their short summer, in a thin, cool, and pure air; during winter, under a perpetual mantle of snow. We, consequently, should yield them shade in the summer, from the heat of the sun; and a covering in winter from the severity of frosts. Unless this be attended to by the cultivator of alpine beauties, he will not be crowned with success.





Pulmonaria Virginica



Lythrum virgatum



Xeranthemum Inciduum



Coenos Canadensis

PULMONARIA VIRGINICA.

VIRGINIAN LUNGWORT.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
BORAGINEÆ.

Native of N. America.	Height. 18 inches.	Flowers in Mar. April.	Duration. Perennial.	Cultivated in 1699.
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No. 133.

In a late page, another species of our present subject was noticed, and thence our readers are referred for the derivation of the word Pulmonaria.

We dislike references from one part of a work to another, and very rarely make it necessary; but where plants of the same genus fall so nearly together, a repetition of the same information might appear useless. It is, notwithstanding, intended that each volume of the Botanic Garden shall be complete in itself. In lieu, therefore, of references, derivations must occasionally be repeated,

The most prominent distinction between the present plant and the *Pulmonaria paniculata* is in the colour of their flowers. The fugitive shades of the latter plant render it superior in attraction; but the *Pulmonaria Virginica* springs forth at an earlier season, when very few rivals are present to vie with it; when every young visitant is doubly welcome, from the promptness with which it comes forth to relieve the poverty of a flowerless garden.

Autumn is the best time for dividing this plant. Very small portions of the root seldom produce blossoms in their first season.

PULMONARIA VIRGINICA.

AMERICAN LUNGWORT.

Height of plant.	Flowers in	Flowers in	Flowers in
1 to 2 feet.	April.	May.	June.

No. 122.

In a very recent number of our present and
past issues, and those our readers are referred
to the description of the word *Pulmonaria*.

The *Pulmonaria virginica* from one part of a work to
another, and very rarely makes it necessary; but
where the plants of the same genus fall so nearly to-
gether, a repetition of the same information might
appear tedious. It is, notwithstanding, intended that
each reader of the *Botanic Garden* shall be complete
in itself. In this, therefore, of reference, de-
scriptions must necessarily be repeated.

The present treatment distinction between the
two species, and the *Pulmonaria paniculata*, is in the
habit of the flowers. The latter is a very
large plant, and its flowers are superior in structure; but the
Pulmonaria virginica is a very small plant, and its flowers
are very few, and are present in the wild
state, when every single plant is deeply colored,
from the transparency with which it comes forth in
the spring, the purity of a flower, when garden.

Astoria is the best time for dividing this plant,
very small portions of the root system, produce the
same in their first season.

Herb. No. 122, p. 1, 1822.

LYTHRUM VIRGATUM.

FINE-BRANCHED LYTHRUM.

Class.
DODECANDRIA.

Order.
MONOGYNIA.

Natural Order.
SALICARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Austria.	3 feet.	July, Aug.	Perennial.	in 1776.

No. 134.

This genus has received its name from its flowers bearing the appearance of clotted blood, which is signified by the Greek word *LUTHRON*, from which is derived our *Lythrum*. *Virgatum* from the Latin *vīrga*, a twig; which is intended as expressive of its mode of growth, the whole plant being composed of straight twiggy branches.

The *Lythrum virgatum* is light and showy, and well adapted for the foreground of the shrubbery, or to mingle with the tall herbaceous subjects in the flower garden.

It is itself herbaceous, somewhat less gay than the *Lythrum salicaria*, or common Willow Herb, but is preferable in its general habit. It is neither so rambling nor intrusive; nor is its increase more rapid than could be wished.

It is very easily propagated by a division of its roots, which may be performed at any time whilst the plant is out of blossom. Like the Willow Herb, it flourishes in almost any soil or aspect, but most so in low and moist situations, or where it is, in a moderate degree, shaded by the larger ornaments of the shrubbery.

Hort. Kew. 2, v. 3, 149.

LYTHRUM VIRGATUM
 THE BRANCHED LYTHRUM.

Order
 MONOCOTYLEDON

Class
 DODECANDRIA

Natural Order
 LYTHRACEAE

Native of	Height	Flowers in	Duration	Introduced
Asia.	5 feet	July, Aug.	Perennial	in 1778

No. 134

This genus has received its name from its flowers bearing the appearance of chatted blades, which is signified by the Greek word *lytron*, from which is derived our *Lythrum*. *Virgatum* from the Latin *virga*, a twig; which is intended as expressive of its mode of growth, the whole plant being composed of straight twigs, branches.

The *Lythrum virgatum* is light and showy, and well adapted for the foreground of the shrubbery, or to mingle with tall herbaceous subjects in the flower garden.

It is itself herbaceous, somewhat less gay than the *Lythrum salicaria*, or common Willow Herb, but is preferable in its general habit. It is neither so rambling nor intrusive; nor is its increase more rapid than could be wished.

It is very easily propagated by a division of its roots, which may be performed at any time whilst the plant is out of bloom. Like the Willow Herb, it flourishes in almost any soil or aspect, but most so in low and moist situations, or where it is in a moderate degree, shaded by the larger ornaments of the shrubbery.

Bot. Rev. 5, t. 140

XERANTHEMUM LUCIDUM.

SHINING XERANTHEMUM.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of N. Holland.	Height. 4 feet.	Flowers in July, Oct.	Duration. Annual.	Introduced in 1799.
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No. 135.

Xeranthemum is derived from the Greek **ZEROS**, dry; and **ANTHOS**, a flower. This compound word is well calculated to express one of the prominent qualities of the genus, the dryness of its flowers; and from this peculiarity it is popularly classed in the tribe of Everlastings. It should be pronounced as if written Zeranthemum. We are induced to notice this from having heard it spoken otherwise.

There is scarcely a seedsman's catalogue but contains Xeranthemum lucidum; and the greater portion of nurserymen, know it by no other name. It has been figured by Andrews, as the Xeranthemum bracteatum, but it will now be found in the botanical catalogues, as the Elichrysum bracteatum. Had we examined it previously to the drawing of it being put into the hands of the engraver, we should have adopted the generic term Elichrysum, on account of its bare receptacle, which is certainly opposed to the character of Xeranthemum.

The flowers of this plant are valued for their use in the composition of a winter nosegay, as well as for producing gaiety in the parterre, or shrubbery. They should be gathered before they are fully

opened, and hung up, with their heads downwards, till quite dry, and their beauty will continue for several years.

The seed should be sown early in the spring; or if sown about Midsummer, the young plants will generally survive the winter and blossom early.

The number of flowers which preserve their beauty when dried is, indeed, very small. Many attempts have been made to preserve the common sorts with their true colours and forms unimpaired, but, as far as we know, without much success. If the less succulent sorts are gathered when perfectly dry, then set upright in boxes, and clean dry sand carefully poured amongst them till they are covered, they may be laid by in a warm room and their shapes will be preserved, but very few will retain their colours.

The following method also has been recommended. Put the flowers into a wide-mouthed glass bottle, and close it by tying oil-cloth firmly over the top of it. Then take a box sufficiently large to hold the bottle in the centre, and admit a bed of the following composition at least four inches thick to surround every part of the bottle. The composition is as follows.

One part Salt-petre.

Two parts Bole ammoniac.

Three parts clean common sand.

These are to be well rubbed together previously to their use, and the box containing the whole is to be deposited in a dry cellar; and, it is said, they will thus continue through the winter quite perfect and fresh.

Hort. Kew. 2, v. 5. 24.

COR'NUS CANADEN'SIS.

CANADIAN DOGWOOD.

Class.
TETRANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAPRIFOLIÆ.

Native of Canada.	Height. 6 inches.	Flowers in July.	Duration. Perennial.	Introduced in 1774.
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No. 136.

This term, or a corresponding one, has been employed by botanists in different languages and ages. Theophrastus used the Greek *KRANEIA*; and after him Pliny used *Cornus*, each implying horny, which alluded either to the hardness of the wood, or the seed, of the plant which bore the name.

Though our present one be a very humble herbaceous plant, the greater part of the same genus is composed of large shrubby subjects, some of which, from the compactness of their wood, are well calculated to support the name attached to them. The *Cornus mascula*, or Cornelian Cherry is mentioned as producing wood of an extremely compact and durable nature, so much so, that for some purposes its wear has been considered equal to that of iron. The Grecians made their spears of it; and the modern Indians their arrows; and of the *Cornus sanguinea*, or common Dogwood, as though to mimic these uses, our own butchers usually make their skewers.

It is propagated amongst us only by division of roots. It flourishes when planted in sandy peat, and seems to prefer a shady situation.

Hort. Kew. 2. v. 1, 261.

CORNUS CANADENSIS.

CANADIAN DOGWOOD.

Class. *VERBACEAE*. Order. *ROSACEAE*.

Native of the North American Continent.

Native of	Height	Flowers in	Duration	Introduced
Canada.	60 feet.	July.	Perennial.	In 1774.

See 136.

The term, or a corresponding one, has been employed by botanists in different languages and ages. Thopson used the Greek *κωνία*; and after him Piny used *Cornus*, each implying something allied either to the hardness of the wood, or the smell of the plant which bore the name.

Though our present one be a very humble tree, bearing plant, the greater part of the same genus is composed of large shrubby subjects, some of which, from the transparency of their wood, are well calculated to support the name attached to them. The *Cornus masculina*, or *Cornelian Cherry* is raised as producing wood of an extremely compact and durable nature, so much so, that for some purposes its wood has been considered equal to that of iron. The Greeks made their spears of it; and the modern Indians their arrows; and of the *Cornus sanguinea*, or common Dogwood, as though to imitate these uses, our own hunters usually make their bows.

It is propagated amongst us only by division of roots. It flourishes when planted in shady soil, and seems to prefer a shady situation.

Bot. Kew. 2. v. 1. 281.





Dianthus caryophyllus

7/8



Claytonia virginica

7/8



Lathyrus tuberosus

7/8



Monarda didyma

7/8

DIAN'THUS CARYOPHYLLUS.

CARNATION.

Variety. Yellow Picotee.

Class.
DECANDRIA.

Order.
DIGYNIA.

Natural Order.
CARYOPHYLLÆ.

Native of England.	Height. 2 feet.	Flowers in June, Aug.	Duration. Perennial.	Cultivated in 1597.
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No. 137.

Dianthus, we have previously had occasion to notice, as derived from the Greek DIOS, ANTHOS, Jove's Flower. Caryophyllus is believed to have been a name originally formed by the Greek merchants for our Asiatic spice, the clove, out of KA-RUON, a nut, and PHULLON, a leaf, from their conceiving it to be the leaf only of a species of Indian nut; though we think, more probably, from the head of the spice, which is literally composed of leaves, being similar to a small nut. Most of our young readers know that the Clove is not the fruit, but merely a dried germen or seed bud, with the unexpanded blossom. This term, Caryophyllus, was afterwards adopted from the scent of the flower.

Carnation seems to have been formed from the Latin carnis, of flesh; from the flesh-colour of some varieties of this flower. Though some say from coronation, the flowers being used on such festive occasions. Linneus, in his reformed system, could not retain Caryophyllus as the generic name, there being no natural relation whatever between the carnation and the spice plant; but as it had been so long established, he continued it as a secondary or trivial name, which

was, as far as possible, his general practice. It is singular, that both he and Jussieu should have adopted it for their natural orders.

The old herbalists, more generally, called these plants Gillyflowers, or Gilloflowers; which is, according to Parkinson, a corruption of July-Flower, and given from its blossoming season; but Martyn says it is evidently derived from the French Giroflée or Giroflier, and quotes Chaucer's spelling of it, Girofler, in support of his opinion.

The varieties of this flower may have changed, conformably to a change in the standard of taste; but whether materially improved, or greatly increased, within the last two or three centuries, is not so easily ascertained. Gerard, who published in 1597, says, in allusion to the Carnation, "that a great and large volume would not suffice to write of every one at large in particular;" and Gerard's ideas of a volume could not have been extremely contracted, when his own consisted of nearly fifteen hundred, folio pages. Neither is our present variety of it so new as some of our friends may suppose, for the same trite author tells us that he had a "Gilloflower with yellow flowers; the which a worshipfull marchant of London, Master Nicholas Leete, procured from Poland, and gave me thereof for my garden, which before that time was never seene nor heard of in these countries."

Of the cultivation of this species we shall, at a future period, treat at length. The present variety, though frequently occupying a place in the conservatory, is even more hardy than the sorts in common cultivation amongst florists.

Hort. Kew. 2, v. 3, 79.

CLAYTONIA VIRGINICA.

VIRGINIAN CLAYTONIA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PORTULACÆ.

Native of N. America.	Height. 4 inches.	Flowers in April, May.	Duration. Perennial.	Cultivated in 1759.
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No. 138.

Claytonia, named from John Clayton, who collected plants in Virginia, and sent them to Gronovius, a physician and botanist of Leyden. Gronovius, with the assistance of Linneus, arranged the plants so acquired, according to the sexual system; and in the year 1739, published them under the title of *Flora Virginica*.

This delicate little subject, which comes in with other simular ornaments of the spring, should have a place in every collection. Though not extremely conspicuous, it is interesting; and is one of those subjects, which, like some of our best friends, rises in our estimation, as our intercourse increases.

As it is with men, so it is with plants: some bear their principal qualifications on their exterior, and are seen by all the world. Others have hidden virtues, which are alone discovered by an intimate acquaintance; and some there are, truly, that neither the scientific nor the unlearned can discover for what good purpose they exist.

This plant increases but slowly in our climate. It may be kept in a pot with the alpines, or be planted in a sheltered shady border of sandy peat.

Hort. Kew. 2. v. 2, 53.

LATHYRUS TUBEROSUS.

TUBEROUS LATHYRUS.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of Holland.	Height. 6 inches.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1597.
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No. 139.

The name of this genus has been transmitted to us from the ancients. Theophrastus, the celebrated Greek naturalist and historian, employed it three hundred years before the birth of our Saviour; and it has been ascertained that he used the term for some plant very similar to the one under consideration. Tuberosus, from its tuberous roots.

The plants comprised in the natural family of which our present subject forms so beautiful an individual, are numerous, and in general very showy. The term papilionaceous has been applied to them from the shape of their flowers; which is derived from the Latin papilio, butterfly.

It is a tribe peculiarly adapted to the uses of the animal creation. The fruit of many sorts is eaten by man, and both the fruit and herbage of many more, are the natural food of numerous granivorous animals; the pea, bean, vetch, the many species of trefoil, &c. may be quoted as familiar instances.

This species of Lathyrus is very ornamental, and well suited to the mingled flower garden. The roots may be divided for increase, and planted in any common garden soil.

Hort. Kew. 2, v. 4, 309.

LATHYRUS TUBEROSUS

THE TUBEROSE LATHYRUS

SYNOPSIS

CHARACTERISTICS

General Notes

Native of	Height	Flowers in	Duration	Established
Malabar.	6 to 10 ft.	June-July	Perennial.	in 1887.

See 124

The name of this genus has been transferred to us from the ancients. Theophrastus the celebrated Greek naturalist and historian, composed 1500 years before the birth of our Saviour, and it has been ascertained that he used the word *lathyrus* some plant very similar to the one under consideration. Tabernaemontanus from his tuberos root.

The plant comprised in the natural family of which our present subject forms so beautiful an individual, are numerous, and in general very showy. The term papilionaceous has been applied to them from the shape of their flowers; which is derived from the Latin *papilio*, butterfly.

It is a tribe peculiarly adapted to the use of the animal creation. The fruit of many sorts is eaten by man, and both the fruit and foliage of many others are the natural food of numerous frugivorous animals; the pea, bean, vetch, the many species of trefoil, &c. may be quoted as familiar instances.

This species of *Lathyrus* is very ornamental, and well suited to the unimproved flower garden. The roots may be divided for increase, and planted in any common garden soil.

How. Kew. G. v. 4. 302.

MONAR'DA DIDYMA.

OSWEGO TEA.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
LABIATÆ.

Native of N.America.	Height. 2 feet.	Flowers in June, Aug.	Duration. Perennial.	Introduced in 1752.
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No. 140.

The generic term *Monarda* was instituted in honour of Nicholas Monardes, a physician of Seville, and a writer of considerable eminence. The trivial name *Didyma* is applied to this species from the flowers having four stamens; or, more properly speaking, two stamens, and the rudiments of two others; consequently it may be considered subdidynamous. It has been called *Oswego Tea*, from its use amongst some of the inhabitants of America, and particularly by those of Oswego. An infusion of the leaves, with sugar and cream, certainly forms a pleasant aromatic beverage, and its quality has been considered mildly febrifuge.

In some parts of England the *Monardas* are indiscriminately known by the name of *Virgin Honeysuckle*. *Virgin*, is doubtless, a contraction of *Virginian*, in allusion to its native place.

From its odour, its appearance, and the facility with which it is propagated, this plant is now very generally met with in small and large collections.

Of its cultivation we need say but little. It may be divided for increase, and grows in any common garden soil.

Hort. Kew. 2, v. 1. 52.

MONARDA DIDYMA.

ORWEGO TEA.

Orwigo
WISCONSIN.

China
HILARITA.

Natural Order.
LABIATA.

Native of	Height	Flowers in	Duration	Introduced
W. America.	3 feet.	June, Aug.	Perennial.	in 1752.

No. 169.

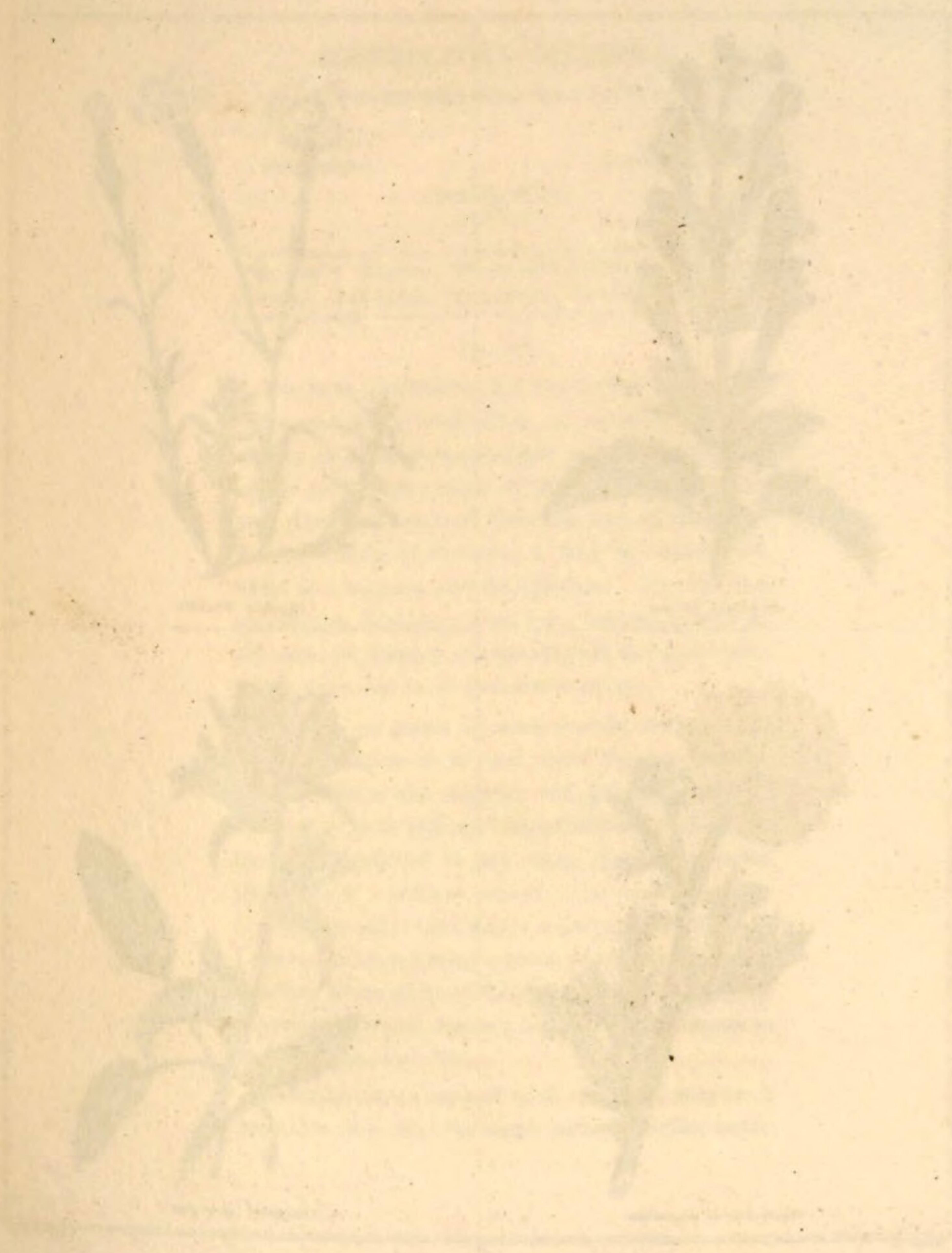
The generic term *Monarda* was instituted in honor of Nicholas Monardes, a physician of Seville, and a writer of considerable eminence. The trivial name *Didyma* is applied to this species from the flowers having four stamens; or, more properly speaking, two stamens, and the rudiments of two others; consequently it may be considered subdidymous. It has been called *Orwigo Tea*, from its use amongst some of the inhabitants of America, and particularly by those of Orwigo. An infusion of the leaves, with sugar and cream, certainly forms a pleasant aromatic beverage, and its quality has been considered mildly febrifuge.

In some parts of England the *Monarda* are indiscriminately known by the name of *Virgin Honey-suckle*. *Virgin* is doubtless a contraction of *Virginia*, in allusion to its native place.

From its odor, its appearance, and the facility with which it is propagated, this plant is now very generally met with in small and large collections.

Of its cultivation we need say but little. It may be sowed for incense, and grows in any common garden soil.

Bot. Rec. 2. 1. 62.





Scutellaria columnar.



Dianthus deltoides.



Chrysanthemum coronarium.



Campanula glomerata.

SCUTELLA'RIA COLUM'NÆ.

HEART-LEAVED SCULL-CAP.

Class.

DIDYNAMIA.

Order.

GYMNOSPERMIA.

Natural Order.

LABIATÆ.

Native of Italy.	Height. 15 inches.	Flowers in June, July.	Duration. Perennial.	Introduced in 1806.
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No. 141.

The term *Scutellaria*, has been adopted from the Latin *scutella*, a small dish; or *scutellum*, a little shield; in allusion to a curious concave appendage which crowns the calyx of the plant. *Columnæ*, used from the name of *Columna*, one of the noble Roman family of *Colonna*, a man of considerable talent as a botanist and draughtsman. The English appellation, *Scull-cap*, must have been suggested by the same peculiarity of appendage to the seed vessel, which gave rise to its systematic name.

Perhaps no genus is more readily distinguished by the formation of its seed vessel than the *Scutellaria*. "From the singular and peculiar shape of the fruit or pericarpium," says *Columna*, "which we have not observed in any other plant, expressing the figure of a military helmet or casque, we thought it proper to call it *Cassida*, for so they call it in Latin." *Linneus*, in his reformed system, suppressed the name alluding to the shape of the entire calyx, and adopted *Scutellaria*, which conveys a more direct allusion to its little attendant dish.

Columna was a man of such talent as renders it unjust to pass over his name without further notice

of his abilities. He published a *Plantarum* at Naples, in 1592; and the copper-plates were principally from his own designs, and superior to any that had preceded them. In the execution of the plates themselves, it is said that he also assisted. He was a mathematician and musician, and seems to have been one of those individuals who, possessing a peculiar versatility of talent, improve every thing that comes under their notice. Though they are not the Philosopher's stone itself, still every thing becomes brighter by their touch. Columna made considerable progress in a new arrangement of plants; and was, perhaps, the first that noticed the parts of fructification as applicable to classification; on which the great Linneus, an hundred years afterwards, built for himself a monument of immortal fame. He was a musician also, and invented an instrument, which he called the *Sambuca Lyncia*. It had five hundred strings, of different lengths, and the tone of each was divided into four parts, to include all the genera, diatonic, chromatic, and enharmonic. This may have been a great achievement, but the inventor surely forgot that there were very few *Columnas* in the world to continue its use.

The flower of the *Scutellaria Columnæ* will recommend itself by its beauty, independently of any further attraction. It may be planted in the open border, in light soil, where it will increase, and sometimes produce seeds. It may afterwards be divided; or seeds may be sown in the spring, in pots, or on an open border of rich earth. It may also be struck from cuttings of the young shoots, which should be planted under a hand-glass.

Persoon's Synopsis, 2, p. 136.

DIANTHUS DELTOIDES.

MAIDEN PINK.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLÉE.

Native of Britain.	Height. 6 inches.	Flowers in June, Aug.	Duration. Perennial.	Cultivated in 1597.
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No. 142.

Having treated of the term *Dianthus*, under No. 108, it needs not here be repeated. *Deltoides*, from the Greek letter delta, which is a triangle; and *EIDOS*, a likeness, in reference to the triangular character of several parts of the plant.

Linneus considered the present subject a distinct species, and called it *Dianthus glaucus*. It is now regarded as a variety only of the common *Dianthus deltoides*, which is of a blush colour, and for this reason, Gerard says, it was called the "Maidenly Pink. Both varieties are extremely pretty, and should not be wanting in any collection of this admired family.

The whole of the *Dianthus* tribe should be carefully protected from too great a portion of moisture. The common varieties of pinks will frequently be lost if planted out in moist and shady borders, and more particularly if it be in worn-out or peaty soil. In fresh light loam the *Dianthus deltoides* will generally flourish; and it may be increased by a division of its roots, made early in the spring. It may either be planted in a pot or in a dry border of the garden.

Hort. Kew. 2, v. 3, 80.

CHRYSANTHEMUM CORONARIUM.

GARDEN CHRYSANTHEMUM.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of Sicily.	Height. 4 feet.	Flowers in July, Oct.	Duration. Annual.	Cultivated in 1639.
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No. 143.

This species of Chrysanthemum legitimately supports the origin of its name, golden flower, as previously noticed. The term Coronarium, may have been suggested from the resemblance of the flower-bud to a little crown or coronet.

This plant is too well known to need description. Its extremely showy appearance in autumn, secures for it a place in almost every garden.

Seeds of it may be sown at the latter end of March, or beginning of April, either where the plants are to flower, or in pots; if in the latter, the seedlings can be transplanted at pleasure.

An excellent mode of propagating this plant, by which the fine double varieties may be continued, is from cuttings. Earlier flowers are also obtained, and the casualties of seed propagation avoided. About the middle of September take cuttings of the young side shoots, three or four inches long, which show no flower buds; plant them in pots, and cover them with a small bell-glass till they have struck. During the winter, protect them from frost, in a greenhouse or light airy room, and in spring they may be turned into the borders.

Hort. Kew. 2, v. 5. 96.

CHRYSANTHEMUM CORONARIUM
 CAMPANIA GLOMERATA
 GARDEN CHRYSANTHEMUM

CEUTEREO BELL-FLOWER

Class: Dicotyledonae
 Order: Asterales
 Natural Order: Compositae
 Family: Asteraceae

Height of plant	Height of flower	Length of tube	Width of tube	Length of style	Width of style
1 to 2 feet	1 to 2 feet	1 to 2 feet	1 to 2 feet	1 to 2 feet	1 to 2 feet

This species of *Chrysanthemum* is a very common and beautiful plant. It is a hardy perennial, and is very easy to grow. The leaves are dark green, and the flowers are of various colors, including white, yellow, orange, and red. The flowers are of the daisy type, and are very attractive. This plant is very popular in gardens, and is often used as a border plant. It is also very easy to propagate, and can be grown from cuttings or seeds.

Seeds of it may be sown at the latter end of March, or beginning of April, either where the plants are to flower, or in pots; if in the latter, the seedlings can be transplanted at pleasure. An excellent mode of propagating this plant, by which the double varieties may be continued, is either cutting, or taking layers, and also division. At about the middle of September, take cuttings of the young side shoots, three or four inches long, which show no flower buds; plant these in pots, and water them with a small bell-glass till they have struck. During the winter, protect them from frost, in a greenhouse or light airy room, and in spring they may be turned into the garden.

CAMPA'NULA GLOMERA'TA.

CLUSTERED BELL-FLOWER.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of Britain.	Height. 1 foot.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1597.
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No. 144.

Campanula, a little bell. Glomerata, brought into a heap, from its head of flowers, which is often more crowded than is shown in our specimen.

This species, as well as a white variety, which is not uncommon, is desirable, from its unobtrusive growth, its habit of free flowering, and the little care demanded in its cultivation.

There are not less than between seventy and eighty distinct sorts of Campanula, nine of which are British. It is a tribe of herbaceous plants that is extremely attractive, and some of them exhibit a fine depth of colouring. But as the seasons have dispelled all their beauties, we can now only admire their images in the efforts of the artist. Thus our gaieties, with revolving time, rise to decline; and decline, to rise again; and we contemplate with wonder, the greatness and the goodness which they invariably display, exclaiming with the inimitable Thomson:—

“Nature! great parent! whose unceasing hand
Rolls round the seasons of the changeful year,
How mighty, how majestic are thy works!
With what a pleasing dread they swell the soul!
That sees astonished! and astonished sings!”

Hort. Kew. 2, v. 1, 349.

CAMPANULA GLOMERATA.

CLUSTERED BELL-FLOWER.

Order.
NIGHTSHADE.

Class.
TETRADYMIA.

Natural Order.
LABIATAE.

Native of	Height.	Flowers in	Duration.	Collected
Britain.	1 foot.	July, Aug.	Perennial.	in 1807.

No. 144.

Campanula, a little bell. *Glomerata*, brought into a heap, from its head of flowers, which is often more crowded than is shown in our specimen.

This species, as well as a white variety, which is not uncommon, is desirable, from its moderate growth, its habit of free flowering, and the little care demanded in its cultivation.

There are not less than between seventy and eighty distinct sorts of *Campanula*, nine of which are British. It is a tribe of herbaceous plants that is extremely attractive, and some of them exhibit a fine depth of coloring. But as the seasons have dispelled all their beauties, we can now only admire their images in the efforts of the artist. Thus our gazettes, with revolving time, rise to decline; and decline, to rise again; and we contemplate with wonder, the greatness and the goodness which they invariably display, exclaiming with the inimitable Thomson:—

"Nature! great parent! whose unnumber'd hand
Rolls round the scenes of the changeful year,
How mighty, how majestic are thy works!
With what a pleasing dread they swell the soul!
That sees unobscured, and undiminished stay;
Hail, Kew, &c. 1, 248.





Anemone palmata.

74



Melissa grandiflora.

75



Campanula speciosa.

76



Lychnis coronata.

77

ANEMO'NE PALMA'TA.

PALMATED ANEMONE.

Class.

POLYANDRIA.

Order.

POLYGYNIA.

Natural Order.

RANUNCULACEÆ.

Native of Portugal.	Height. 9 inches.	Flowers in May, June.	Duration. Perennial.	Cultivated in 1790.
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No. 145.

Why this family of plants received the name of Anemone, is not easy to determine. All parties agree that it originated in the Greek ANEMOS, wind; hence the appellation wind-flower, by which it is usually known. The term may be applied in various ways to different species, as the blowing about of its downy seeds; the easily agitated flowers; the bleak situation which some species prefer, &c. and in addition to these the ingenious botanist may suggest others. Palmata, from the Latin, hand-shaped: a term applied to such leaves as are partly divided into several segments or lobes.

This handsome species of Anemone was not generally known to our old English botanists, though Gerard both mentions and delineates one that has been considered synonymous. Its identity is not, however, sufficiently clear, and it may be thought rather curious, that this ingenious old author should have given the figure of a plant which, we may conclude, was drawn wholly from his informant's verbal description. In reference to it he says, "but my selfe can giue you no certaine knowledge of the plant; bicause I did never see it."

If the aforesaid old author be an authority worth quoting for the virtue of plants, the Anemones may be considered a valuable tribe of vegetables in these inveterate snuff-taking days; for he saith, "the leaves stamped, and the iuce sniffed vp into the nose, purgeth the head mightily."

The major part of the tribe are extremely attractive, and universal favourites; some for their modest delicacy, others for their dazzling brilliancy; whilst one or two species not only come with the earliest part of spring, but precede it. They are harbingers of that joyous season of the year.

The dreary winter solstice is no sooner passed, than the anxious botanist encourages every pleasing anticipation of a season so reviving to his pursuits, and so welcome to every one.

—"Not all that Autumn's lap contains,
Nor Summer's ruddiest fruits,
Can aught for thee atone,
Fair Spring! whose simplest promise more delights
Than all their largest wealth, and through the heart
Each joy and new-born hope
With softest influence breathes."

The cultivation of the numerous varieties of beautiful double Anemonies may, like that of the growth of Auriculas, &c. be almost ranked amongst the minor sciences; our present subject does not, however, require any peculiar care, nor would it be likely to yield its original modest colouring to any management of the florist. When the roots are required to be parted, it should always be performed early in the autumn, before they begin to vegetate. A light loamy soil is very favourable to its luxuriance.

Hort. Kew. 2, v. 3, 338.

MELIS'SA GRANDIFLO'RA.

GREAT-FLOWERED BALM.

Class.

DIDYNAMIA.

Order.

GYMNOSPERMIA.

Natural Order.

LABIATÆ.

Native of	Height.	Flowers in	Duration.	Introduced
S. Europe.	9 inches.	July, Aug.	Perennial.	in 1640.

No. 146.

Melissa, the Greek name of a bee, was originally formed from the Greek primitive MELI, honey. The term has been applied to the present family of plants in consequence of the abundance of honey produced by its flowers, for which they are greatly frequented by the common honey bee. Grandiflora, from the Latin, great-flowered.

The various species of which Linneus constituted the genus Melissa, have been subjected to division and distribution. Sir J. E. Smith considers a part of them as belonging to Thymus, whilst others have revived the old name, Calamintha, for all the species usually comprised under Melissa, excepting the officinalis, or common garden Balm, which is left sole occupant of their genus Melissa.

Grew, whose work on the Anatomy of Plants is well known, was a close observer of nature; and in noticing the Melissa officinalis, or common Balm, he says it is observable that its green leaves, which yield a muscadine red to water, give a pure and perfect green to spirit of wine; which no other plant that he had tried would yield. He infused both the leaves and flowers of plants in various menstruums,

for the purpose of discovering the true combination and attraction of the constituents of their colouring matter. He observed that oil received a green from plants by infusion, but not a perfect blue, neither would spirit of wine; but water received all colours excepting a perfect green.

The theory of Grew was built on the supposition that there exists a set of vessels, or as he terms them, Lymphæducts, that abound in a compound of sulphur and acid, which is favourable to the production of blues, reds, and purples; whilst another set, which he terms air vessels, contain a sub-alkaline salt, that mixes with the essential oil of the vegetable, and produces a green colour. The predominance of the Lymphæducts, charged with their own compound, in various proportions, or in various combinations with the air vessels, gives, he argues, all the beautiful variety of colours exhibited in the vegetable creation.

The production of the different colours in vegetables, by the predominance of acids or alkalies, we have found to be prettily shown by the following experiment.

Make an infusion, by pouring hot water on the dried petals of red roses (*rosa centifolia*), usually kept by druggists; it will have but little colour till a small quantity of liquor potassæ be added, when the infusion will become perfectly green; add sulphuric acid, and it will become red; and the colour may be alternately changed by the predominance of the acid or alkali. If the infusion be made of alcohol, in lieu of water, it will at first be colourless, but the ultimate results will be the same.

Hort. Kew. 2, v. 3, 417.

CAMPANULA SPECULUM.

VENUS'S LOOKING-GLASS.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	6 inches.	May, July.	Annual.	in 1596.

No. 147.

Campanula, from the Latin, a little bell. Speculum is retained as a trivial name in the Linnean arrangement, in consequence of the plant having been formerly called Speculum veneris, after the Dutch "Vrowen spiegel;" the translation of which, Venus's Looking-glass, we still retain. Some have supposed that the Dutch adopted this appellation from the shining surface of its seeds.

It has been the custom of most botanists, where a trivial name has been adopted, which was formerly a principal one for the same plant, to distinguish such word by a capital letter, and none other of the trivial names. On the one hand, this practice must be unimportant, because those to whom it can be advantageous will possess works which shew the whole of the useful synonyms. And, on the other, contrary to the common rules of writing, proper names are commenced with a small letter. We have, therefore, not adhered to the usage.

As the Campanula speculum withstands the severity of our winters, it is a valuable annual to sow in the autumn, which induces an early bloom, when its flowers are the more desirable.

Hort. Kew. 2, v. 1, 352.

1870	1871	1872	1873	1874	1875
1876	1877	1878	1879	1880	1881

1882

Comparison of the Latin, Greek, and other names of plants, and the names of the same in the English language, in consequence of the plant having been formerly called *Spergularia*, after the Dutch botanist, the translation of which, *Venus*, looking like, is still retained. Some have supposed that the Dutch adopted this appellation from the spelling of its name.

It has been the custom of most botanists, when a trivial name has been adopted, which was formerly a principal one for the same plant, to distinguish each word by a capital letter, and some of the trivial names. On the one hand, this practice may be unimportant, because those to whom it can be of use will possess works which show the value of the word, and on the other, contrary to the common rule of writing, proper nouns are commenced with a small letter. *It is* here, *however*, not referred to the genus.

As the *Campylopus* specimens resemble the variety of our winter, it is a valuable name to give in the autumn, which induces an early bloom, when its flowers are the more desirable.

LYCHNIS CARONATA.

CHINESE LYCHNIS.

Class.
DECANDRIA.

Order.
PENTAGYNIA.

Natural Order.
CARYOPHYLLÆ.

Native of China.	Height. 18 inches.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1774.
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No. 148.

Lychnis, from the Greek LUCHNIS, a lamp, was probably applied by the ancient botanists to some of the present Lychnis tribe on account of the inflated semi-transparent calyx that they produce. Coronata from the Latin, crowned; in allusion to its crown or head of flowers.

This species of Lychnis is extremely gay and brilliant, and well deserves a place in every flower garden. It has usually been considered a greenhouse plant, which accounts for it not being more generally sought after by the cultivator of the hardy beauties of the garden. It certainly cannot be considered so completely weather-proof as many of our old standards of the parterre, but a temporary covering of straw or mats, during severe frosts, will effectually protect it.

A safe plan for the preservation of the Lychnis coronata is to take a portion of the plant, in the beginning of September, and put it into a pot: if the pot be then sunk in the soil it will require but little attention in watering, and when frosts commence it may be removed to a cold frame, or other protection from its severity.

Hort. Kew. 2, v. 3, 133.

LYCHNIS CAROLINATA.

CHINESE LYCHNIS.

Order.
TETRASTYLIA.

Class.
DIOGYNIA.

Natural Order.
CARYOPHYLLACEAE.

Native of China.	Height. 18 inches.	Flowers in June, July.	Duration. Perennial.	Established in 1774.
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No. 148.

Lychnis, from the Greek *lychnis*, a lamp, was probably applied by the ancient botanists to some of the present *Lychnis* tribe on account of the inflated semi-transparent calyx that they produce. *Coronaria* from the Latin, crowned; in allusion to its crown or head of flowers.

This species of *Lychnis* is extremely gay and brilliant, and well deserves a place in every flower garden. It has usually been considered a greenhouse plant, which accounts for it not being more generally sought after by the cultivator of the hardy beauties of the garden. It certainly cannot be considered so completely weather-proof as many of our old standards of the past, but a temporary covering of straw or mats, during severe frosts, will sufficiently protect it.

A safe plan for the preservation of the *Lychnis coronata* is to take a portion of the plant, in the beginning of September, and put it into a pot: if the pot be then sunk in the soil it will require but little attention in watering, and when frost commences it may be removed to a cold frame, or other protection from its severity.

Bot. Rev. T. v. 2, 121.





Cytisus nigricans.

71



Gypsophila prostrata.

72



Crocus versicolor.

73



Rubus arcticus.

74

CYTISUS NIGRICANS.

BLACK-ROOTED CYTISUS.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	3 feet.	June, July.	Perennial.	in 1731.

No. 149.

Cytisus is a term supposed to have been derived, indirectly, from Cythnus, an extremely fruitful island of the Grecian Archipelago, containing about sixteen thousand Greek Christians, and which exhibits vestiges of an ancient city of extraordinary splendour. It is now called Thermia. Nigricans, from the Latin, indicative of its black roots.

This species of Cytisus is a particularly showy little shrub, and is well suited to the purpose of mingling with low American plants. Its slender branches exhibit a beautiful luxuriance of blossoms in the middle of summer, and sometimes again in the autumn. It is deciduous, and of rather bare appearance in winter,—

“ But let the months go round, a few short months,
And all shall be restored. These naked shoots,
Barren as lances, among which the wind
Makes wintry music, sighing as it goes,
Shall put their graceful foliage on again.” COWPER.

This species of Cytisus may readily be propagated from seeds, which should be sown in March. The young plants should be sheltered from severe frosts during the first winter of their growth.

STYRACIS AGRIUM

BLACK-ROOTED STYRACIS

Styracis
agrium

Styracis
agrium

Native Name	Height	Flowers in	Flowers in	Flowers in
Styracis	2 feet	June, July	June, July	June, July

No. 140

Styracis is a term applied to various species, but in this case, it refers to a species of the genus Styracis, which is a member of the family Styracaceae. The plant is a small tree or shrub, and it is native to the United States. It is a member of the genus Styracis, which is a member of the family Styracaceae. The plant is a small tree or shrub, and it is native to the United States.

This species of Styracis is a particularly small tree or shrub, and it is well suited for the purpose of planting in the garden. It is a member of the genus Styracis, which is a member of the family Styracaceae. The plant is a small tree or shrub, and it is native to the United States.

The plant is a small tree or shrub, and it is native to the United States. It is a member of the genus Styracis, which is a member of the family Styracaceae. The plant is a small tree or shrub, and it is native to the United States.

The young plants should be planted in the garden during the first year of their growth. It is a member of the genus Styracis, which is a member of the family Styracaceae. The plant is a small tree or shrub, and it is native to the United States.

Styracis agrium

GYPSO'PHILA PROSTRATA.

TRAILING GYPSOPHILA.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Siberia.	5 inches.	July, Aug.	Perennial.	in 1759.

No. 150.

Gypsophila is derived from two Greek words, GUPSOS, lime; and PHILEO, to love. Thus, a compound word gives us direct information that the plants of this genus delight in a calcarious or limestone soil. Prostrata, trailing or lying.

Though this plant is seldom more than a few inches in height, its branches are usually a foot or more in length. The various species of Gypsophila would meet with more general cultivation if it were not inconvenient to plant them in a dry gypseous soil, or lime rubbish; where they would yield greater attraction, by a more luxuriant production of flowers, with branches less intrusive.

This genus has been minutely attended to by Sir J. E. Smith, who has made some addition to it, as published in the Flora Græca, by transferring three species of Saponaria to it, as more correctly belonging to Gypsophila, as well in habit as in the shape of their parts of fructification.

It may be sufficiently increased by dividing the roots. A moist rich soil should be avoided, from its tendency, in such situation, to increase its branches at the expense of its blossoms.

Hort. Kew. 2, v. 3, 74.

GYPSOPHILA FLORENTINA

TRAILING GYPSOPHILA

Gray,
Flora

Gray,
Flora

Flora of the
California

Native of	Height	Flowers in	Location	Collected
British	5 inches	July-Aug.	California	in 1759

No. 150

Gypsophila is derived from two Greek words, *gypso*, lime; and *phila*, to love. Thus, a compound word gives us direct indication that the plants of this genus delight in a calcareous or limestone soil. *Florentina*, trailing or creeping.

Though this plant is seldom more than a few inches in height, its branches are usually a foot or more in length. The various species of Gypsophila would meet with more general cultivation if it were not inconvenient to plant them in a dry, gypsaceous soil, or lime rock; where they would yield greater attraction, by a more luxuriant production of flowers, with branches less intricate.

This genus has been minutely attended to by Mr. J. E. Smith, who has made some addition to it, as published in the *Flora of Greece*, by transferring three species of *Nepenthes* to it, as more correctly belonging to Gypsophila, as well in habit as in the shape of their parts of fructification.

It may be sufficiently increased by dividing the roots. A moist rich soil should be avoided, from its tendency, in such situation, to increase its branches at the expense of its blossoms.

How. Rev. B. v. 2, 74

CROCUS VER'SICOLOR.

PARTY-COLOURED CROCUS.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.

IRIDEÆ.

Native of S. Europe.	Height. 5 inches.	Flowers in March.	Duration. Perennial.	Introduced in 1629.
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No. 151.

The term *Crocus* is extremely ancient, and it cannot be surprising if a few of the attempts to elucidate its derivation be somewhat at variance with truth. Some authors have conceived that the word originated from the Greek *κροκε'*, a thread; in allusion, evidently, to its thread-like style; and not to any part of the stamens, as intimated by a modern writer. Others think it may have come from *Coriscus*, a city of Cilicia.

There is scarcely a flower of the garden with which every one claims a more friendly acquaintance than with those of the *Crocus*. In all our visits we meet them with pleasure; but how few amongst us enquire by what means they have been sheltered from the severity of the past winter; or have thought of exploring their residence, through that dreary season.

Of the three principal divisions into which roots have been distributed,—bulbous, tuberous, and fibrous; the bulbous, or bulb-bearing, root is by far the most interesting.

Though a bulb be familiarly spoken of as a root, it should be distinctly understood that it is not so;

but is a mere appendage to the roots ; a species of winter protection for the young plant, as distinct from the roots as is the bud of a tree.

Bulbs have exercised the ingenuity of the most scientific botanists ; and it is extremely gratifying to watch their annual reproduction : to observe the progress of their incipient blossoms, from their earliest formation to maturity ; and to detect a flower, in the recesses of a little bulb, where it is discoverable in embryo, several months before its appearance to the common observer. If a tulip bulb be cut through, in the autumn, the miniature flower will be found in the centre, perfect in all its parts, in proportion to its advanced stage of vegetation. Of its future colour no evidence, at that period, can exist, because this is a property dependant on exposure to the atmosphere ; whereby the fluids of its vessels, which have been stored up in the bulb, or newly taken in by the roots, are properly concocted with gases imbibed therefrom.

Though it be as indispensable that vegetables be admitted to imbibe atmospheric air, as it is for animals to breathe it, yet a flower is not always dependant on immediate contact with the atmosphere for its colouring principles ; for we frequently find it conveyed to them through the medium of the foliage, at a period when the flowers are most ingeniously protected against any exposure. The crocus flower, at the time the leaves are issuing from the earth, presents a familiar example. Our young friends will find an examination of these bulbs and flowers, in different stages of their growth, particularly interesting.

RUBUS ARCTICUS.

DWARF BRAMBLE.

Class.
ICOSANDRIA.

Order.
POLYGYNIA.

Natural Order.
ROSACEÆ.

Native of Scotland.	Height. 4 inches.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1748.
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No. 152.

Rubus is an old Latin word, believed to have originated in the Celtic term rhudd, signifying red ; and applied to this genus, as indicative of the prominent colour of some of its plants and their fruit. Arcticus, Latin, northern ; being a native of northern countries ; for as well as being indigenous to a few of the mountains of Scotland, it is found in Labrador ; and also in some of the most northern parts of Europe.

Linneus has described this plant minutely, and with gratitude extols it. He found it in Lapland, where both wine and jelly are made from its berries ; from which he had often experienced the most salutary relief, when fainting with fatigue and oppressed with hunger,—circumstances under which he not unfrequently laboured, whilst in the arduous pursuit of botanical science. One plant, newly discovered, would, however, cover the remembrance of a multitude of toils.

The Rubus Arcticus grows freely in mellow peat earth, in an eastern aspect ; yet experience indicates, that in the low altitude of England, we shall not obtain a luxuriant produce of its berries.

Hort. Kew. 2, v. 3, 270.





Spiraea trifoliata.

35



Phyteuma orbiculare.

36



Duplehalanum grandiflorum.

37



Primula cortusoides.

38

SPIRÆA TRIFOLIATA.

THREE-LEAVED SPIRÆA.

Class.
ICOSANDRIA.

Order.
DI-PENTAGYNIA.

Natural Order.
ROSACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
N. America.	2 feet.	Aug. Sept.	Perennial.	in 1713.

No. 153.

The name of this genus, *Spirea*, was borrowed from Theophrastus, who applied a similar term to a plant which is supposed to have belonged to this family. The name, it is thought, originated in the Greek word *SPEIRA*, signifying a rope, in allusion to the flexible stems that some of these plants produce. *Trifoliata*, from the Latin, three-leaved.

This pretty species of *Spiræa*, Mr. Curtis observed, nearly thirty years ago, was a plant much coveted; increasing but little, propagated with difficulty, and liable to be lost, unless planted in a soil and situation highly favourable to it; and that it was scarce in the gardens about London. He planted it on a northern border, in a moist situation, and in peat earth. Our specimen was gathered from a plant growing on a moderately dry rich loam, on the outside of the eastern end of a green-house, where it flourished without peculiar care, and flowered very freely.

Miller says that seeds of it should be sown in the autumn, to insure their vegetation in the spring. This we have had no opportunity of trying. It may be increased by the roots.

Our present subject, the *Spiræa trifoliata*, with the *Spiræa stipulacea*, have lately been separated from their original family, to constitute a new genus, under the title *Gillenia*, each plant still retaining its former trivial name.

An American botanist, Dr. Bigelow, observes that the separation of *Gillenia* from *Spiræa* is one of those cases, upon which the botanist may hesitate long, without finding reasons strong enough to influence his decision. There is, nevertheless, something in the irregular corolla, taken in conjunction with the campanulate calyx, which may afford a reason for following the example of Mœnch, in considering it a distinct genus.

The medicinal virtue of this plant is similar to that of ipecacuanha, but less powerful. The root is the part used, and its predominant soluble ingredients appear to be a bitter extractive matter, and resin. When boiled in water, it imparts to it a beautiful deep red colour, and an intensely bitter taste. Water, distilled from the root, has its peculiar flavour, with little of the bitterness.

Dr. De la Motta, in an Inaugural Dissertation, published at Philadelphia, in 1810, gives a very explicit account of the effects of this plant on himself. Twenty-five grains of the dried root, divided into four doses, taken at intervals of fifteen minutes, he found to be very successful as an emetic.

This *Spiræa* is said to possess a tonic power, which appears very probable from its bitter taste; and by the fact, that small doses of ipecacuanha exert a very beneficial stimulus on the stomach, in certain cases of debility of that organ.

Hort. Kew. 2, v. 3, 257.

PHYTEUMA ORBICULARE.

ROUND-HEADED RAMPION.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

CAMPANULACEÆ.

Native of England.	Height. 18 inches.	Flowers in June, Aug.	Duration. Perennial.	Cultivated in 1633.
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No. 154.

Phyteuma is a term used by the Grecian writers, and is allowed to have been derived from PHUTEUO, to sow. Orbiculare, from the Latin Orbis, an orb or circle, the application of which is evident.

Each corolla, of this species of Phyteuma, forms a little curved horn; and it is rather remarkable that the five cohering segments, into which each corolla divides itself, first separate at their lower part, and form openings, after the fashion of the Spanish costume, usually termed slashing.

It is difficult to determine the application of the name Phyteuma, to the genus of plants before us. This, however, cannot be matter of surprise, when we consider that it was instituted 2000 years ago; at a period when the science had no established language of description; and when it is also considered that 1000 of the intervening years present a blank, in respect to the pursuits of the naturalist.

Botany, at least any system which can be considered worthy of the title, is of very modern date. According to Sprengel there are seventy-one plants noticed in the Old Testament. From the days of the prophets, to the birth of our Saviour, the pro-

gress of botany was inconsiderable; for, near the christian era, Dioscorides, who followed Hippocrates and Theophrastus, enumerated but about 600 plants. Pliny, in the year 74, from a careful examination of nearly 2000 volumes of Greek and Roman authors, increased the list to nearly 1000.

In the succeeding 1400 years, which brings us through the dark ages, nearly all that had been done consisted in the collection of fragments from the wreck of the ancients, and mingling them with superstition and error. Not more than 500 new plants were noticed through so great a space of time. The whole, too, were still in chaotic confusion. During the sixteenth century, vegetable history made a rapid stride. Classification commenced; printing lent her aid; and Clusius, Gesner, Cæsalpinus, Bauhin, and their contemporaries, did more than had been effected in all the previous ages of the world. Between the year 1600 and 1700, Morison, Ray, Tournefort, Boerhaave, and several others, gave splendid specimens of industry and penetration. At this time, about 6000 plants were registered, and classed agreeably to different systems; each arrangement ingenious, but still defective in practice. It remained for the celebrated Linneus, in the last century, to promulgate a system of classification, at once fraught with ingenuity, and simple in practice. He published nearly 9000 distinct species of plants, and left the science so attractive to his successors, that the avidity with which it has been pursued, has already increased the number of described plants to nearly 40000, independent of cryptogamous subjects.

Hort. Kew. 2, v. 1, 354.

BUPHTHALMUM GRANDIFLORUM.

GREAT-FLOWERED OX-EYE.

Class.
SYNGENESIA.

Order.
POLYGAMIA FRUSTRANEA.

Natural Order.
CORYMBIFERÆ.

Native of Austria.	Height. 18 inches.	Flowers in July, Sep.	Duration. Perennial.	Introduced in 1722.
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No. 155.

Our English appellations, in the present instance, agree perfectly with the systematic terms. Ox-eye, presents us with a suitable conception of the generic name Bupthalmum; which is derived from the Greek BOUS, an ox; and OPHTHALMOS, an eye. Grandiflorum, Latin, great-flowered. The generic name, without doubt, was first bestowed on a white-rayed flower, with a dark coloured disk; a character which, probably, is not possessed by any species of Bupthalmum, as this genus is at present constituted. If so, the necessary systematic division of genera, must have thrown from this family, the very plant with which its name originated. Several have been distributed into other genera; amongst which may be noticed Anthemis, Chrysanthemum, Oedera, Verbisina, each of which has shared in the division made from Bupthalmum.

This showy herbaceous plant is sometimes raised from seed, and its offspring frequently presents trifling varieties of appearance. The roots also admit of division for increase, and these may be planted in any common garden soil, in whatever aspect is most convenient.

Hort. Kew. 2, v. 5, 126.

PRIMULA CORTUSOIDES.

CORTUSA-LEAVED PRIMROSE.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of Siberia.	Height. 5 inches.	Flowers in May, July.	Duration. Perennial.	Cultivated in 1794.
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No. 156.

Primula, from primus, first; in allusion to the early flowering of some of the plants of this family. Our wild primrose, and its varieties, are amongst the most attractive first-offerings of spring. Cortusoides, was adopted by Linneus, from the habit of the plant being similar to that of a species of Cortusa; and the termination OIDES from the Greek EIDOS, a likeness.

This is an interesting little plant for a pot, to be classed with other alpine subjects, that require shade in summer, and frame protection during the severity of winter. It continues in flower much longer, and is far less tender, than are several of the alpine primula tribe. We have seen it flourish in the open ground, after exposure to long and intense frost.

Seeds are sometimes perfected on the Primula cortusoides, from which young plants may be raised. They should be sown in the spring, on rich light earth, and exposed to the morning sun only. Mid-day heat is oftentimes fatal to delicate seedlings. The roots may occasionally be divided; and a mixture of sandy peat with fresh red loam forms a compost which is very favourable to its growth.

Hort. Kew. 2, v. 1, 308.

PRIMULA CORTUSOIDES

CORTUSIA-LEAVED PRIMULA

Color.
Horticulturist.

Color.
Horticulturist.

Height of plant.
Horticulturist.

Height of plant	Flowers in	Flowers in	Flowers in
2 feet	May, July	August	in 1794

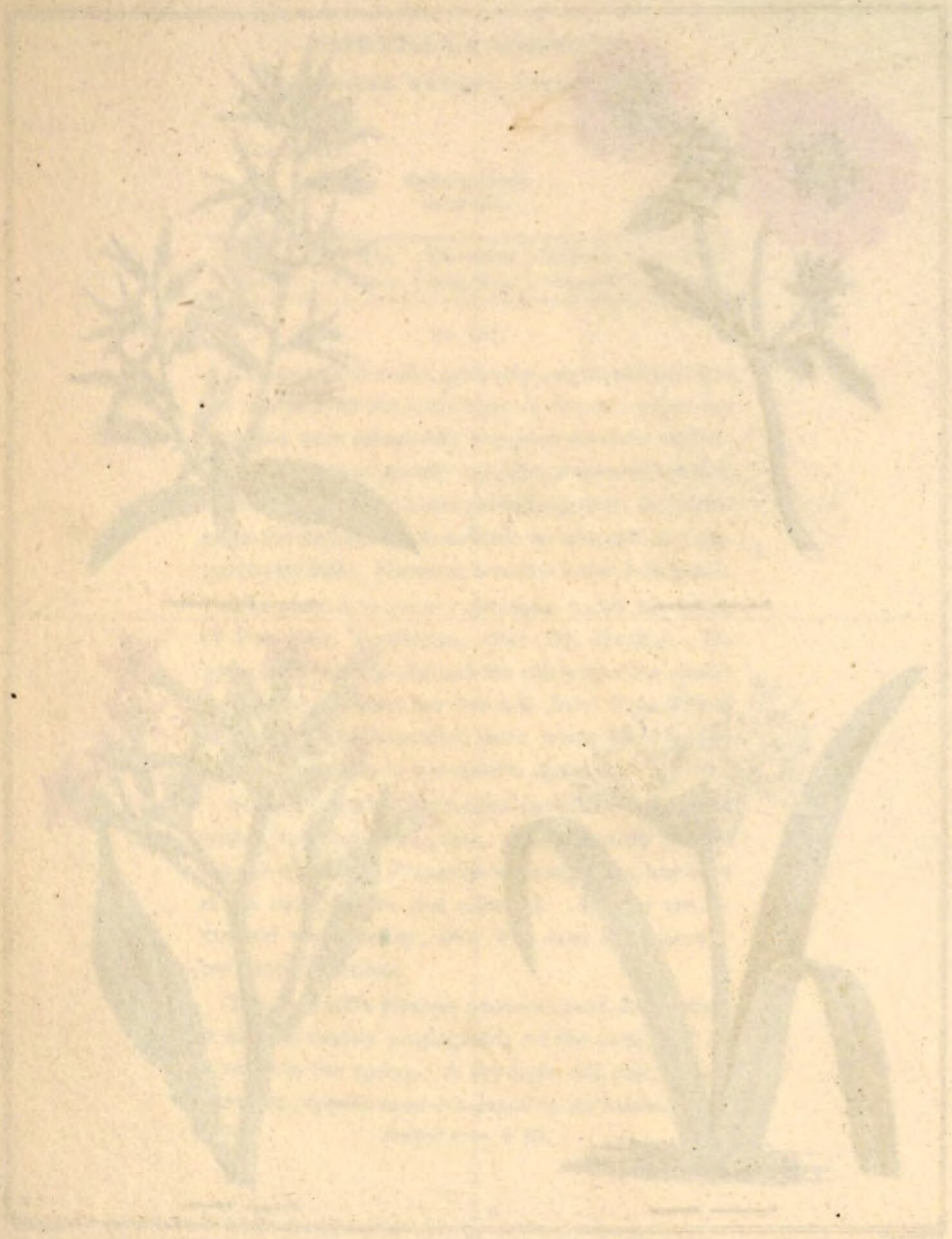
No. 102

Primula, from persons, first; in allusion to the early flowering of some of the plants of this family. Our wild primula, and its varieties, are amongst the most attractive first-fruiters of spring. Cortusoides, was adopted by Linnaeus, from the habit of the plant being similar to that of a species of Cortusa; and the termination of the word from the Greek, *κέρως*, a horn.

This is an interesting little plant for a pot, to be placed with other alpine subjects, that require shade in summer, and some protection during the severity of winter. It continues in flower much longer, and is far less tender, than are several of the alpine primula tribe. We have seen it flourish in the open ground, after exposure to frost and intense heat.

Seeds are sometimes protected on the Primula cortusoides, from which young plants may be raised. They should be sown in the spring, on rich light earth, and exposed to the morning sun only. Mid-day heat is abundant fatal to delicate seedlings. The roots may occasionally be divided; and a mixture of sandy peat with fresh soil forms a compost which is very favorable to its growth.

See also No. 101.





Potentilla formosa.

36



Phyteuma campanuloides.

36



Pancratium Illyricum.

36



Nicotiana glauca.

36

POTENTILLA FORMOSA.

HANDSOME NEPAUL CINQUEFOIL.

Class.
ICOSANDRIA.

Order.
POLYGYNIA.

Natural Order.
ROSACEÆ.

Native of Nepaul.	Height. 6 inches.	Flowers in July, Aug.	Duration. Perennial.	Introduced in 1822.
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No. 157.

The term *Potentilla*, probably originated amongst the Simplers of the early ages of botany, when vegetables were principally regarded for their medicinal virtues; and specific qualities were attributed to each. It is from the Latin *potentia*, power; but formed in the diminutive, to indicate its strength as comparatively little. *Formosa*, from the Latin, handsome.

The plant is in some collections under the name of *Potentilla Nepalensis*, after Dr. Hooker. No great merit can be claimed for either specific name; for as other species are brought from Nepaul, and are also equally beautiful, these terms have no peculiar application to one species alone.

Several beautiful *Potentillas* have been introduced within the last few years, and this, with one of deeper colour, the *Potentilla atrosanguinea*, has been much sought after and admired. As they are increased with facility, they will soon be generally received favourites.

The *Potentilla formosa* produces seed, from which it may be readily propagated; or the roots may be divided in the spring. A dry light soil, and a warm situation, appear most congenial to its habits.

POTENTILLA FORMOSA

LEAFY BRANCHES WITH FLOWERS

Color
Description

Color
Description

General Notes
Remarks

Flowers in	Flowers in	Flowers in	Flowers in
July, Aug.	July, Aug.	July, Aug.	July, Aug.

No. 397

The term *Potentilla*, probably originated amongst the Simpson of the early years of botany, when vegetables were principally regarded for their medicinal qualities and specific qualities were attributed to them. It is the Latin *potentilla*, however; but derived from the Greek *potentia* to indicate its strength or power. *Potentilla*, from the Latin, handsome.

The plant is in some collections under the name of *Potentilla Nepandrea*, after Dr. Hooker. No great credit can be claimed for either specific name; but on other points are brought from *Nepandrea* and are equally beautiful, these terms have the same application to one species alone.

Several beautiful *Potentilla* have been introduced within the last few years, and this, with several others, are the *Potentilla chinensis*, has been introduced recently after and adopted. As they are all crossed with each other, they will soon be generally treated as one.

The *Potentilla* has one handsome seed, from which it may be readily propagated; or the roots may be divided in the spring. A dry light soil, and a warm situation, appear most congenial to its habits.

Height 2 to 3 ft.

PHYTEUMA CAMPANULOIDES.

CAMPANULA-FLOWERED RAMPION.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Hungary.	2 feet.	July, Aug.	Perennial.	in 1804.

No. 158.

Phyteuma, from the Greek of DIOSCORIDES, signifying to sow or plant. Campanuloides, bearing a likeness to the campanula.

In the Flora Græca, this plant is called Phyteuma ellipticum; and the editor of that work expresses a desire, that such specific name should supersede the use of the subsequently bestowed one, campanuloides. Usage, however, has established the one that we have adopted, and on that account it should be preferred, though for other reasons, it be less desirable than the term ellipticum.

The beautiful spikes of blossoms which are produced by this plant, render it worthy a place in every collection; and though each individual flower be not in itself of a conspicuous character, the aggregation of them produces a gay effect. Under cultivation, it assumes a luxuriance and a smoothness of exterior, which are not its apparent characters when found in a wild state.

Its roots may be divided for increase, which should be effected in the spring; and a rich loamy soil, in an open situation is very conducive to its healthy and free growth.

Hort. Kew. 2, v. 1, 353.

PHYTUM CAMPAULOIDES.

CAMPANULA-FLOWERED RANUNC.

Order.
RANUNC.

Class.
RANUNC.

Michael Owen
CARTER.

Native of	Height	Flowers in	Duration	Introduced
Managua.	2 feet.	July, Aug.	Perennial.	in 1884.

No. 128.

Phytum, from the Greek of phytos, signifying to sow or plant. Campanuloides, bearing a likeness to the campanula.

In the Flora Græca, this plant is called Phytum ellipticum; and the author of that work expresses a desire, that such specific names should supersede the use of the synonymously bestowed one, campanuloides. L'ange, however, has established the one that we have adopted, and on that account it should be preferred, though for other reasons, it be less desirable than the term ellipticum.

The beautiful spikes of phytum which are produced by this plant, render it worthy a place in every collection; and though each individual flower be not in itself of a conspicuous character, the aggregation of them produces a gay effect. Under cultivation, it assumes a luxuriant and a more showy exterior, which are not its apparent characters when found in a wild state.

Its roots may be divided for barman, which should be effected in the spring; and a rich heavy soil, in an open situation is very conducive to its healthy and free growth.

How. Nov. 2, 1884.

PANCRATIUM ILLYRICUM.

ILLYRIAN PANCRATIUM.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
AMARYLLIDÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	18 inches.	June.	Perennial.	in 1605.

No. 159.

The name of this genus is of Greek origin, and seems to have been first conferred on some bulb, or tribe of bulbs, of more potent qualities than the subject under consideration; probably to some of our species of Garlic; as the word is derived from PAN, all; KRATUS, power. Illyricum, from Illyria, the ancient name of a portion of the south of Europe, where this plant is indigenous.

It is not unfrequently brought to England from the Dutch nurseries, and is by no means rare in our English gardens. Its hardy character and its fragrant showy flowers at once recommend it.

It was observed, nearly thirty years ago, to be very generally in our nurseries under the name of *Pancratium maritimum*; an error much spread by Miller, and which seems to have continued to the present day.

The bulbs should not, by choice, be transplanted oftener than once in three or four years; and then the removal is best effected soon after the decay of the leaves. The offsets may be taken for increase, as occasion requires, and a rather dry light soil should be preferred.

Hort. Kew. 2, v. 2, 220.

PANCHATIUM HETTERICHII

HELVETIC PANCHATIUM

Order
RUBRACEAE

Class
RUBRACEAE

Vegetative parts
ANALYSIS

Height in inches	Flowers in inches	Flowers in inches	Flowers in inches
1.5	1.5	1.5	1.5

No. 150

The name of this genus is of Greek origin, and seems to have been first conferred on some bulb, or tribe of bulbs, of more recent date than the subject under consideration; probably to some of our species of Garlic; as the word is derived from *garos*, all; *kratos*, power. *Heterichia*, from *heteros*, the ancient name of a portion of the south of Europe, where this plant is indigenous.

It is not independently brought in England from the Dutch nurseries, and is by no means rare in our English gardens. Its hardy character and its fragrant showy flowers at once recommend it.

It was observed, nearly thirty years ago, to be very generally in our nurseries under the name of *Panchatium nuttallianum*; an error much spread by Miller, and which seems to have continued to the present day.

The bulbs should not, by choice, be transplanted often, than once in three or four years; and then the removal is best effected soon after the decay of the leaves. The plants may be taken for interest, as occasion requires, and a rather dry light soil should be preferred.

Bot. Kew, v. 2, 220.

NICOTIANA TABACUM.

VIRGINIAN TOBACCO.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
SALANEE.

Native of N. America.	Height. 6 feet.	Flowers in July, Sept.	Duration. Annual.	Cultivated in 1570.
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No. 160.

The generic appellation, Nicotiana, was adopted after the name of John Nicot, an ambassador of Francis II. of France, at the court of Portugal. At Lisbon, in 1564, he obtained seeds of the plant, which had been brought from Florida, and conveyed the same to France, where the herb soon became a general favourite. The Indian name is Tubacka, whence might have come our Tabacum and Tobacco, though its origin is generally attributed to the name of the island, Tobago, situate near the coast of Mexico, where it is indigenous.

To give but a faint outline of all that has been said and done respecting Tobacco, would require many volumes. The introduction of the practice of smoking has been commonly ascribed to Sir Walter Raleigh, about the year 1584; and the excess to which its use, or rather abuse, was soon afterwards carried, must have been great indeed to have called forth the numerous invectives, and even laws against it. King James I. added his name to the list of its opponents, and wrote a philippic, entitled a "Counterblaste to Tobacco," in which he warns his subjects, in an earnest manner, not to sin against

God, and harm their own persons and goods, and render themselves scorned and contemned by strangers, who should come among them, by persevering in "a custome loathsome to the eye, hateful to the nose, and harmefull to the braine."

In Russia, also, smoking was forbidden under the pain of having the nose cut off; and so late as 1690, the Romans were excommunicated if detected in using snuff or tobacco in the church of St. Peter. In various other countries, also, the public authorities have been at one time or other, equally strenuous in their endeavours to suppress the use of what one man calls a pernicious weed, whilst another designates it the "plant divine." Men, like certain animals of inferior order, are but imitators of others' actions, or smoking and snuffing would be far less prevalent in the present day. Its virtues, as it is usually employed, are very doubtful; its gratifications artificial.

Though it may be cultivated in England with considerable success, its qualities are likely to be more acrimonious; being found mild in flavour, in proportion to the heat of the climate in which it has grown. Its cultivation here is, however, prohibited by an act of Charles II., otherwise, than to the extent of half a pole, in a Physic Garden.

Sow the seeds in March, in a pot of light soil, in a hot-bed; and when the seedlings are an inch or two high, pot them separately. Gradually harden them, and turn into the open ground in May, without disturbing the roots. Water freely. American growers take off the top and side shoots, leaving six or eight leaves only, to grow for use.

Hort. Kew. 2, v. 1, 390.





Liatris scariosa.

76



Carthamus tinctorius.

77



Oenothera Fraseri.

78



Campanula persicifolia.

79

LIA'TRIS SCARIO'SA.

SCALY-CUPPED LIATRIS.

Class.
SYNGENESIA.

Order.
POLYGAMIA ÆQUALIS.

Natural Order.
CORYMBIFERÆ

Native of N. America.	Height. 2 feet.	Flowers in September.	Duration. Perennial.	Cultivated in 1759.
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No. 161.

Of the origin of the term *Liatris* we know nothing. *Scariosa*, scaly; in reference to the formation of its calyx.

All the species of *Liatris*, that have been introduced to this country, are natives of America, and though several are not of recent introduction, they are still but sparingly met with. It is stated by Pursh that in some parts of North America, the *Liatris scariosa* and *Liatris squarrosa* are called the rattlesnake's master, on account of their efficacy in the cure of the bite of that reptile. Probably Mr. Catesby alludes to the root of this plant, when speaking of the Americans, and their antidotes to the poison of the rattlesnake. He says, "But that which they rely on the most, and which the Virginian and Carolina Indians carry dry in their pockets, is a small tuberous root, which they procure from the remote parts of the country. This they chew, and swallow the juice, applying some to the wound."

It may be divided in the spring; and flourishes in a light rich soil. Seeds are not produced in England from plants in the open ground. Probably the roots would bear drying.

CARTHAMUS TINCTORIUS.

OFFICINAL CARTHAMUS.

Class. SYNGENESIA. *Order.* POLYGAMIA ÆQUALIS.
Natural Order. CYNAROCEPHALÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Egypt.	18 inches	June, July.	Annual.	in 1751.

No. 162.

Carthamus, from the Greek KATHAIRO, in allusion to the cathartic properties of its seeds and flowers. Tinctorious, from the Latin tinctura, a dye or colour ; which term has been adopted in allusion to the colouring principles of its flowers.

This plant has long been cultivated in various parts of the world, for the value of its flowers, which are sent to this country, as an article of commerce, under the name of safflower.

About the year 1680, the culture of it was tried in England, when twenty-five acres of land, in the Gloucestershire part of the vale of Evesham, were planted with it ; and though no profit was realized by this speculation, enough was effected to show that it might then have been cultivated with considerable advantage.

Safflower is prepared by cutting off the florets of the Carthamus tinctorious, above the calyx, as soon as they open, when quite free from moisture ; and, if possible, before any rain has fallen on the expanded flowers. They are then dried on a kiln, and laid up for use.

Safflower is used for various purposes of dying ;

also for pink saucers, and vegetable rouge, which are prepared from it in the following manner.

Wash safflower till no stain is given to the water, and then dry it. Of this take half an ounce; infuse it a short time in a pint of water, in which a dram of the subcarbonate of soda has been previously dissolved; strain off the liquid, to which add an ounce of finely levigated French chalk. The alkali will hold the colouring matter of the safflower in solution, and the chalk will remain colourless; but by adding a little tartaric or citric acid, the alkali will be neutralized, and the red colouring matter, which is not soluble in simple water, being set at liberty, will fall to the bottom, combined with the chalk. Thus a beautiful pigment is produced, which may be dried, and further levigated for spreading on saucers; or ground with a drop or two of olive oil, will form the Spanish or vegetable rouge. Liquid pink dye is a similar preparation, with a portion of spirit of wine.

This flower possesses two distinct qualities of colour. The one yellow, which readily yields to water; the other red, which is insoluble in water and oils, but is soluble in alcohol and æther. The alkalies dissolve it, but injure its colour; but it is again restored by acids.

Being annual, it must be raised from seed, which should be sown on a border of light earth, early in April. As some of the seeds, from gathered florets, which are always abortive, are generally mixed with those that are fertile, an extra quantity should be used. If put on the mingled flower border, one plant in each place will be sufficient.

Hort. Kew. 2, v. 4, 491.

ŒNOTHE'RA FRASE'RI.

FRASER'S EVENING PRIMROSE.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of N. America.	Height 2 feet.	Flowers in June, July.	Duration. Perennial.	Introduced in 1811.
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No. 163.

Œnothera is derived from the Greek οἶνος, wine; and THERA, pursuing or catching; a name which is mentioned by Theophrastus as having been given to a plant on account of its root catching or acquiring the perfume of wine, from being dried. The origin of this word, though in the present day apparently far fetched, supported as it is by ancient authority, cannot be questioned. This admitted, we must, doubtless, conform to the accentuation of the third syllable. The specific name Fraseri, was given in honour of Mr. John Fraser, who first introduced it to notice, from North America.

It is an extremely showy plant, perfectly hardy, of free increase, and which no garden should be without. It resembles the Œnothera fruticosa, excepting in its capsule, which is quadrangular. Its growth is also somewhat smaller.

It flourishes freely in strong or light soil, and may be divided every spring or autumn, if required. It may also be raised from seeds, which will sometimes grow spontaneously where they happen to have been shed at the end of the summer; and produce blossoms in the second year.

Pursh. Fl. Amer.

THE HISTORY OF THE
CITY OF NEW YORK

FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
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THE CITY OF NEW YORK
FROM THE FIRST SETTLEMENT
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VOL. I.

CAMPA'NULA PERSICIFO'LIA.

PEACH-LEAVED BELL-FLOWER.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of S. Europe.	Height. 2½ feet.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1596.
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No. 164.

Campanula, signifying a little bell, is noticed under No. 130. Persicifolia, from persica, the systematic name of the peach ; and folium, a leaf.

This is a very old inhabitant of the English garden. It has been duly estimated, and very generally cultivated through many generations. There are several varieties of it, as the single white, and single blue, and double varieties of each colour ; also some of larger growth than the usual sorts, which rise nearly four feet high. Their shades of blue likewise vary in degree of brilliancy.

The Campanula persicifolia is treated of by Gerard, in his Herbal of 1596, and under precisely the same name as we now know it. The single varieties have generally given place to the double ones ; but whichever is the received favourite, it cannot fail to prove ornamental to the mixed assemblage of summer beauties.

It is not in the least degree fastidious as to soil or situation ; it never fails to flourish, which is a valuable acquisition in a gay plant. The roots will always afford sufficient increase, and these may be divided in spring or autumn.

Hort. Kew. 2, v. 1, 347.

CAMPANULA PERSICIFOLIA

PEAR-LEAVED BELL-FLOWER

Order
ROSEACEAE

Class
Dicotyledonae

Neander Order
CAMPANULACEAE

Native of	Height	Flowers in	Location	Cultivated
S. Europe	2 1/2 feet	July, Aug.	Provence	in 1866

No. 130

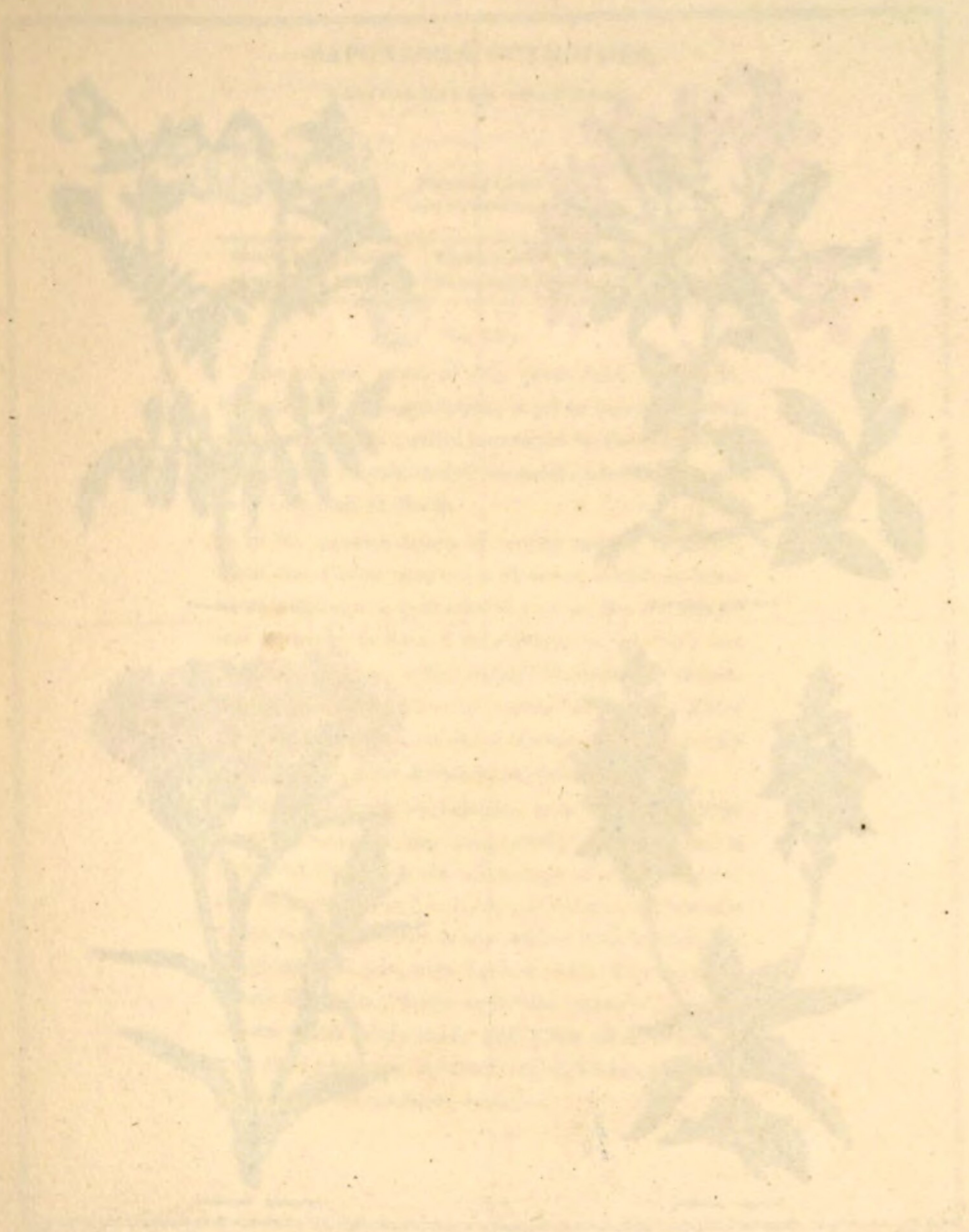
Campanula persicifolia, slightly a little bell, is noticed under No. 130. *Persicifolia*, from *persica*, the tree-tomato name of the peach; and *folium*, a leaf.

This is a very old inhabitant of the English garden. It has been long cultivated, and very generally cultivated through many generations. There are several varieties of it, as the single white, and single blue, and double varieties of each colour; also some of larger growth than the usual sort, which rise nearly four feet high. Their shades of blue likewise vary in degree of brilliancy.

The *Campanula persicifolia* is treated of by Gerard, in his *Herbal* of 1536, and under precisely the same name as we now know it. The single varieties have generally given place to the double ones; but whichever is the received standard, it cannot fail to prove ornamental to the mixed assemblage of summer beauties.

It is not in the least degree fastidious as to soil or situation; it never fails to flourish, which is a valuable acquisition in a gay plant. The roots will be very often sufficient to increase, and these may be divided in spring or autumn.

Bot. Beech. 9, t. 1, 347.





Saponaria oeymoides.



Calceolaria pinnata.



Veronica urticifolia.



Dianthus Japonicus.

SAPONARIA OCYMOIDES.

BASIL-LEAVED SOAPWORT.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLÆ.

Native of France.	Height. 6 inches.	Flowers in June, July.	Duration. Perennial.	Introduced in 1768.
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No. 165.

The generic name of this plant, from the Latin, like our English appellation, is given in consequence of a saponaceous quality possessed by the *Saponaria officinalis*. *Ocymoides*, from its likeness to the common *Ocymum* or Basil.

In the pronunciation of words ending in *IDES*, from the Greek *EIDOS*, a likeness, which in botanical language is preceded by an *o*, the *oi* should not be made to form a diphthong, as in *toil*; but each of these two letters should be distinctly sounded, giving the accent or stress to the *i*. Elder readers will excuse our desire of being useful to junior botanists, by thus noting apparent truisms.

The *Saponaria ocymoides* is a delightful little plant for ornamenting rock-work, where the soil is light and dry, with the advantage of a little shade; and though its small half-shrubby stems will assume an aspect of poverty in the winter, still a luxuriant offspring will generally appear, with the vegetable tribes that shoot forth upon the parterre, in that season when every bank and plain unite to form a universal nosegay; a season which Thomson clearly presents to the reader's view.—

“Fair handed Spring unbosoms every grace;
Throws out the snowdrop and the crocus first,
The daisy, primrose, violet darkly blue,
The polyanthus of unnumbered dyes;
The yellow wallflower stained with iron brown,
And lavish stock, that scents the garden round.”

The peasant poet, Clare, also, often courts his muse when influenced by the attractions of the uncultivated beauties of Spring.—

“Bowling adorers of the gale,
Ye cowslips, delicately pale,
Upraise your loaded stems;
Unfold your cups in splendour, speak!
Who decked you with that ruddy streak,
And gilt your golden gems?”

“Violets, sweet tenants of the shade,
In purple’s richest pride arrayed,
Your errand here fulfil;
Go, bid the artist’s simple stain
Your lustre imitate, in vain,
And match your Maker’s skill.

“Daisies, ye flowers of lowly birth,
Embroiderers of the carpet earth,
That stud the velvet sod;
Open to Spring’s refreshing air,
In sweetest smiling bloom declare
Your Maker, and my God.”

It is most conveniently increased by slippings, which may be taken off as early as the month of May. If these be planted in a pot of rich sandy soil, covered with a bell-glass, and placed in a hot-bed, they will readily strike root, and become strong plants before the approach of winter.

Hort. Kew. 2, v. 3, 77.

CALCEOLARIA PINNATA.

PINNATE, OR WINGED-LEAVED SLIPPERWORT.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Peru.	9 inches.	July, Aug.	Annual.	in 1773.

No. 166.

The term *Calceolaria* has originated in the Latin word *calceolus*, a little shoe; from the curiously shaped flower of some of these plants, the greater part of which afford a more perfect idea of the resemblance to a shoe than is shown by the present species.

The young botanist will not, of course, pass by this unassuming little plant without due examination; and we would recommend the casual observer to bestow a second glance upon the flower, that he may see one, amongst thousands, of the singular provisions of nature, which are continually afforded for the due protection of all her productions. The shape of the flower is very similar to that of *Calceolaria corymbosa*, in which the ringent or gaping corolla has the lower lip pendulous; but in the present species the inflated lower lip is turned upwards, and closes over, and protects, the parts of fructification.

Seeds of this annual should be sown in pots, and put within the frame of a hotbed, in March, and the young plants will bear removing into the borders about the end of May.

Hort. Kew. 2, v. 1, 44.

1880
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1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
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No. 105

The term *Colobos* has originated in the Latin
 word *colobus*, a half shoe; from the curiously
 shaped flange of some of these plants, the greater
 part of which is a more perfect shoe of the re-
 semblance to a shoe than is shown by the present
 species.

The young *Colobos* will not, of course, pass by
 this reasoning little heed without due examina-
 tion; and we would recommend the careful obser-
 ver to bestow a second glance upon the flower, that
 he may see that, though the flange of the calyx
 presents a shape which is certainly not
 for the due protection of the reproductive parts.
 The shape of the flower is very similar to that of *Colo-*
bos *carolinensis*, in which the calyx or cup
 corolla has the lower lip produced; but in the
 present species the inferior lower lip is turned up-
 wards, and the upper, and protuberant, the parts of
 the corolla.

The seeds of this annual should be sown in pots, and
 put within the frame of a hotbed, in which the plants
 young should be kept removing into the garden
 about the end of May.

Bot. Nov. 2, 1881.

VERONICA URTICÆFOLIA.

NETTLE-LEAVED SPEEDWELL.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Austria.	18 inches.	June, July.	Perennial.	in 1776.

No. 167.

The existence of the term Veronica, declares it to have had an origin, but we really cannot allot it a parent. The uncertainty of its derivation leaves us in corresponding doubts respecting its pronunciation. A Greek etymology has been given to it from PHERO, to bear; and NIKE, victory; intended to indicate a pre-eminence over other plants. If this be admitted as the derivation, the pronunciation of the *i* must be long; but the accentuation of the antepenult is so firmly established, that it would now be somewhat treasonable to disturb it. Several respectable authors have followed Withering in giving a preference to the long sound of the *i*; but as the word cannot be referred to its origin, and is universally pronounced Veron'ica, it may seem but affectation to attempt the change of what is unimportant. Urticæfolia, from urtica, a nettle; and folium, a leaf.

Some of the species of Veronica have varieties with different coloured flowers, and nearly all of them are hardy and of easy culture. The present species admits of being divided at the root in the usual seasons, for increase.

Hort. Kew. 2, v. 1, 33.

VERONICA FISTULOSA.

WETZEL-LEAFED FISTULOSA.

Wetzel-leafed
Fistulosa.

Wetzel-leafed
Fistulosa.

Wetzel-leafed
Fistulosa.

Native of	Height	Flowers in	Flowers in	Flowers in
18 inches	18 inches	18 inches	18 inches	18 inches

Wetzel-leafed

The existence of the two *Veronica*, distinct in
to have had an origin, but we really cannot allow it
a parent. The uncertainty of its derivation leaves
us in corresponding doubt respecting its parent-
relation. A Greek etymology has been given to it
from *veron*, to bear; and *veron*, veron; intended
to indicate a procumbent ever green plant. It
this be admitted as the derivation, the pronunciation
of the *r* must be long; but the pronunciation of the
anaphora is so freely established, that it would
now be somewhat unreasonable to dispute it. Several
respectable authors have followed *Whitney*, in
giving a preference to the long sound of the *r*; but
as the word cannot be referred to its origin, and
is universally pronounced *Veronica*, it may seem
but equitable to attempt the change of what is
unimportant. *Veronica*, from which, a verb;
and follow, a leaf.

Some of the species of *Veronica* have varieties
with different colored flowers, and nearly all of
them are hardy and of easy culture. The present
species stands of being divided in the rest in the
usual manner, for instance.

For more, see p. 12.

DIANTHUS JAPONICUS.

JAPANESE PINK.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLÆ.

Native of China.	Height. 6 inches.	Flowers in June, Aug.	Duration. Perennial.	Introduced in 1804.
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No. 168.

Dianthus, from the Greek, may be literally translated Jove's Flower. The trivial name, Japonicus, is derived from Japan, where this species is indigenous, as well as in China; countries, particularly the latter, which, without doubt, abound in vegetable beauties of the most magnificent order.

When we examine a few of the plants of China, such as the splendid varieties of the Camellia, Rose, Tree Peony, and Chrysanthemum, it may reasonably be inferred that the native flowers of that country are of superior beauty; and by the laudable exertions of societies and wealthy patrons of the science, we may hope to possess many others of its splendid productions. This is much to be desired, on account of many of them bearing the temperature of our own more northern climate, particularly those of the arboreous class.

The Dianthus Japonicus may be planted in the borders, in a light loamy soil. It will also flower well if kept in a pot, and sunk in the soil during summer, and removed to a cold frame in the winter. It may be divided for increase; or, the side branches may be laid, as carnations.

Hort. Kew. 2, v. 3, 79.

DIANTHUS JAPONICUS.

JAPANESE PINK.

Order.
CARYOPHYLL.

Order.
CARYOPHYLL.

Native Order.
CARYOPHYLL.

Native of China.	Height. 6 inches.	Flowers in June, July, &c.	Flowers in June, July, &c.	Introduced in 1864.
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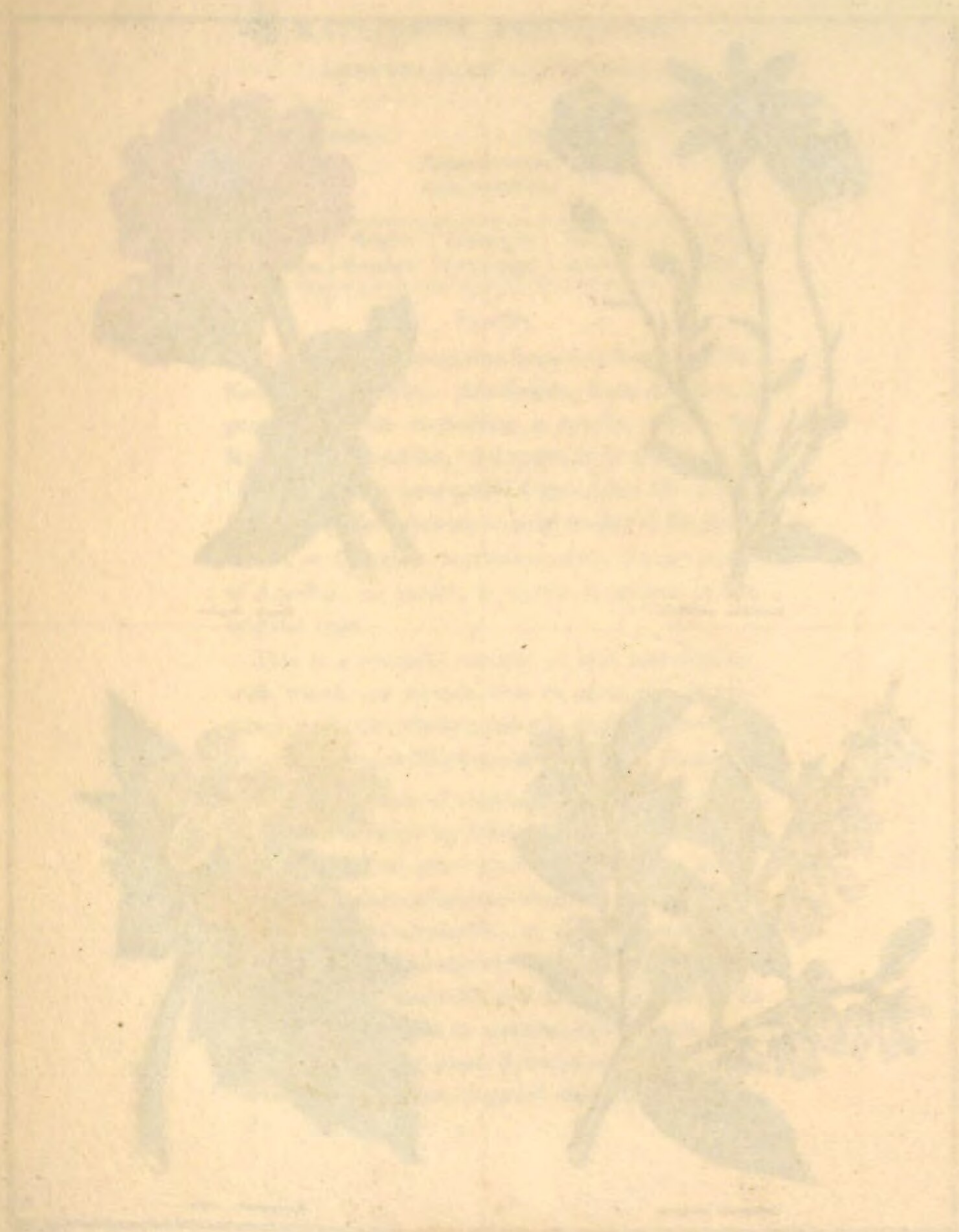
No. 108.

Dianthus from the Greek, may be literally translated *Jato's Flower*. The trivial name, *Japonicus*, is derived from Japan, where this species is indigenous, as well as in China; countries, particularly the latter, which, without doubt, abound in vegetable beauties of the most magnificent order.

When we examine a few of the plants of China, such as the splendid varieties of the *Camellia*, *Hemlock*, *Tree Peony*, and *Chrysanthemum*, it may reasonably be inferred that the native flowers of that country are of superior beauty; and by the insatiable cravings of societies and wealthy patrons of the sciences, we may hope to possess many others of its splendid production. This is much to be desired, on account of many of them bearing the temperature of our own more northern climate, particularly those of the arborescent class.

The *Dianthus Japonicus* may be planted in the borders, in a light loamy soil. It will also flower well if kept in a pot, and sunk in the soil during summer, and removed to a cold frame in the winter. It may be divided for increase; or, the side branches may be laid, or cuttings.

Roots 2 or 3 in.





Kaulfussia antelloides.

35



Zinnia elegans.

36



Andromeda coriacea.

35



Hyoscyamus niger.

35

KAULFUSSIA AMELLOIDES.

AMELLUS-LIKE KAULFUSSIA.

Class.

SYNGENESIA.

Order.

POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Introduced
C. G. Hope.	9 inches.	July, Aug.	Annual.	in 1819.

No. 169.

The term Kaulfussia was formed in honour of Dr. Kaulfuss, of Halle. Amelloides, from Amellus, a genus of plants containing a species which the Kaulfussia resembles; and IDES, from the Greek, a likeness. It has been called Cape-Aster-like Kaulfussia; but though more strictly similar to the Cape Aster, or Cineraria amelloides, than to any species of Amellus, it, surely, is better to adhere to the original type.

This is a beautiful annual, of late introduction, with which our friends will be pleased. It produces seeds very freely; and will, doubtless, be soon as well known as Mignonette and China Asters.

A great number of vegetables have some change of character, either by folding their leaves, closing their flowers, or other mode of protection, during the night, or the continuance of unpropitious weather. The Kaulfussia amelloides, as shown in our figure of it, possesses a peculiarity which is, in some degree, contrary to the usual laws of floral protection. In general, such plants as occasionally vary the position of the corolla, close it, more or less, over the centre of the flower, to guard the internal organs

from dew or rain. But our present plant, at night, or in overcast weather, has its petals rolled back, apparently for their own protection, leaving the centre, or parts of fructification, wholly exposed.

Linneus observed the habit of many plants, in closing their flowers, and gave a treatise on the subject, in the *Amœnitates Academicæ*, vol. iv. He has noticed the habit of the *Nymphæa alba*, or White-flowering Water Lily, which is well known to close its flowers in the afternoon, and lay them on the surface of the water till morning, when it raises and expands them, often, in a bright day, to several inches above the water.

The ancient botanists also have recorded their observations on this subject; for Theophrastus, more than 300 years before the birth of our Saviour, wrote to the same effect, respecting the Egyptian Lotus; and further observes, that "It is reported that in the Euphrates, the head and flowers keep sinking till midnight, when they are so deep in the water as to be out of the reach of the hand, but towards morning they return, and still more as the day advances. At sunrise they are already above the surface, with the flower expanded; afterwards they rise high above the water."

We have raised the *Kaulfussia amelloides* by sowing seeds in pots of light soil, put into a hotbed. When the young plants came up they were thinned; and in May the contents of the pots were transferred to the borders, without breaking the balls of mould. It is not in any degree tender; and will succeed equally well, when sown in the borders; and, as it is an early flowerer, forcing becomes less important.

Bot. Mag. v. 47, t. 2177.

ZIN'NIA EL'EGRANS.

PURPLE FLOWERED ZINNIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of Mexico.	Height. 2 feet.	Flowers in July, Sep.	Duration. Annual.	Introduced in 1796.
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No. 170.

This genus was named after Dr. Zinn, of Göttingen. Elegans, from the Latin, handsome. In the Botanical Repository, this species is treated of under the name of *Zinnia violacea*, after Cavanilles; but it having been previously published by Jacquin, as *Zinnia elegans*, this appellation has been very generally preferred.

This is an annual of considerable beauty, and though it does not produce so great a succession of flowers as we are supplied with by the majority of our favourites, still, for this deficiency ample compensation is made, by a longer duration of each flower in perfection.

Young plants may be successfully raised, by sowing the seeds in a hotbed, in March. When they are an inch or two high, they should be potted, two or three together, and be gradually hardened to the atmosphere. In the middle of May they will be strong plants to turn into the open ground, which should be done without disturbing their roots. In the absence of a hotbed, the seeds may be sown in a rich light soil in the open ground, in the beginning of April.

Hort. Kew. 2, v. 5, 92.

ANDROMEDA COMPLANATA

LEATHER-LEAFED ANDROMEDA

Common in the
 mountains of the
 Pacific States
 and Mexico

Native of	California	Height	10 to 20 ft.	Flowers in	clusters	Leaves	obovate
Native of	California	Height	10 to 20 ft.	Flowers in	clusters	Leaves	obovate

No. 171

This genus is included in the natural order
 genus of this and others for the title. In the
 botanical nomenclature, Andromeda is represented as
 the possible daughter of the king of Ethiopia;
 when the Hyacinth was first, and found to be such,
 to be destroyed. However, from the latter genus,
 it is derived from the name of the king of Ethiopia.
 This species of the Andromeda is represented as
 interesting characters amongst the latter of the
 shrub and from the leaves being prostrate at
 somewhat later period, is distinguished from
 with the latter, which is a tree, and it is
 the leaves being white, and the flowers about the
 leaves, which flowers that are more showy than
 most others of the genus.

Though it bears the reputation of our variable
 season, it is not only well, and flowers freely, and the
 dead vegetation of its branches or flower stalks,
 which usually occur, clearly indicate that it suffers
 from an unpropitious climate.

The Andromeda receives may be propagated by
 layer, but does not at the end of June; observing that
 the young shoots only will strike root.

Bot. Rep. 3, p. 2, 24

HYOSCY'AMUS NI'GER.

COMMON HENBANE.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

SOLANEE.

Native of Britain.	Height. 2 feet.	Flowers in July, Aug.	Duration. Biennial.	Inhabits Barren pl.
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No. 172.

Hyoscyamus is derived from the Greek *us*, a hog; and *kuamos*, a bean; a name supposed to have been adopted from the shape of the capsule, and a reference to hogs; on account of the herb being innoxious to these animals, whilst to others it is poisonous: or perhaps, from some occasion, error, or incident, now unknown. Some writers have contradicted the statement of its qualities being inoffensive to swine, or any other animals; if, therefore, any of our readers can, from experience, assert facts relative to this question, we shall be happy to put them on record. It is said to be destructive to poultry, hence its designation Henbane. Niger, from the Latin, black; in allusion to the colour of the seeds.

The Hyoscyamus niger is not only interesting as a medicinal plant, but is otherwise worthy of cultivation. Its flowers have not much gaiety of character, but they possess an exquisite delicacy of pencilling, which compensates for the absence of brilliant colouring. The capsules continue on the stem during the winter, and as they are covered with a tolerably permanent lid, the seed is preserved and

scattered at various seasons, much to the increase of chances that no unpropitious circumstances can destroy all its future progeny.

The roots, seeds, and leaves of this plant are narcotic and poisonous; and generally acknowledged to resemble opium in action, more than any other narcotic drug. In a moderate dose, Dr. Hooper observes, it increases, at first, the strength of the pulse, and occasions some sense of heat, which are followed by diminished sensibility and motion; in some cases, by thirst, sickness, stupor, and dimness of vision. In a large quantity it occasions profound sleep, hard pulse, and sometimes fierce delirium, ending in drowsiness or convulsions, with a remarkable dilatation of the pupils of the eyes, distortion of the countenance, a weak tremulous pulse, and eruption of small red spots.

Its baneful effects are best counteracted by a powerful emetic, and by drinking largely of the vegetable acids. It is principally given as a substitute for opium, where the latter sedative is observed to disagree with the habit, and in cases where the constipating properties of opium render it improper, a quality from which the Henbane is free.

The seeds smoked, in the manner of tobacco, have frequently proved beneficial in tooth-ache, but convulsions and temporary insanity are said to follow their use in this way: notwithstanding this, their power is thought to be less active, in general, than that of other parts of the plant, as a small quantity of them have been eaten without injury.

Sow seeds in autumn, and the plants will flower about the following midsummer.

Hort. Kew. 2, v. 1, 388.





Anchusa Italica.



Ononis hircina.

24



Tulipa suaveolens.

25



Scilla bifolia.

26

ANCHUSA ITALICA.

ITALIAN BUGLOSS.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
BORAGINEÆ.

Native of S. Europe.	Height. 3 feet.	Flowers in June, Oct.	Duration. Perennial.	Cultivated in 1597.
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No. 173.

The term Anchusa is of Greek origin; from ANCHOSA, in allusion to its astringent, or, perhaps some imaginary, qualities, that the plant was thought to possess.

The Anchusa Italica is not alone desirable for the brilliant colour of its flowers; but also for the succession of them during several months. The first, or spring stems, yield their blossoms through great part of June and July. During these months another progeny will shoot forth to succeed them in gay luxuriance; till the icy hand of autumn crushes all their beauty.

If our young friends will take one of the purple buds, a day previous to its opening, and carefully cut off the segments of the corolla, without injuring the interior, they will disclose the five scales of pellucid pubescence. These form an object of great beauty, when shown by the assistance of a microscope, or even an eye glass, of short focus.

In the Hortus Kewensis, this plant is marked as biennial; hence the error has been copied into minor works. It is best raised from seeds; and these frequently grow where shed by the plant.

ANCHUSA ITALICA.

ITALIAN BUGLOSS.

Order.
MONOCOTYLEDON.

Suborder.
MONOCOTYLEDON.

Height.	Flowers.	Stamens.	Style.
2 feet.	June, Oct.	15-20.	15-20.

No. 122.

The term *Anchusa* is of Greek origin; from *anchusa*, in allusion to its sanguine or purple colour, descriptive of the plant was applied to flowers.

The *Anchusa italica* is not alone desirable for the brilliant colour of its flowers; but also for the succession of them during several months. The first of spring flowers, yield their place through great part of June and July. During these months another progeny will shoot forth to succeed them in May, June, and July; till the very heart of autumn crowns all their beauty.

If our young plants will take root, the purple buds, a day previous to its opening, and which is at all the expense of the corolla, without opening the flower, they will discharge the blue scales of petaloid substance. These form an object of great beauty, when shown by the assistance of a lens. In the flower *hemerocallis*, this plant is worked as

perennial; but the error has been copied into various works. It is not raised from seeds; and therefore it is not grown where sown by the plan.

Bot. Kew. v. 1. p. 101.

ONONIS HIRCINA.

STRONG-SCENTED REST-HARROW.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Italy.	18 inches.	June, July.	Perennial.	in 1596.

No. 174.

The name of this genus has been handed down from the ancients, and is derived from the Greek ONOS, an ass; and ONEMI, to delight; in consequence of the partiality of those animals towards the plant which originally bore the appellation; but that it was any one which is now so called, is not quite certain. Hircina, from the Latin hircus, a goat; in allusion to the goat-like smell of the herb. Our English species, the Ononis spinosa, obtained the name of Rest-plough or Rest-harrow, from the resistance given by its strong cord-like roots to these implements of the farmer.

Several species of the Rest-harrow, even the wild one of the English banks, the Ononis spinosa, are rendered very ornamental, if kept in poor gravelly soil; but when planted in rich light earth, both the roots and branches, of the latter one in particular, extend themselves unduly, and but few flowers are proportionally yielded.

The stems of this species are herbaceous, and the root is hard and woody, like the wild one just noticed. It may be propagated from seeds, sown in the spring; or the roots may be divided.

Hort. Kew. 2, v. 4, 276.

ONONIS HIRCA

STRONG-ROOTED HEST-BARROW

Order
DIECARYS

Class
DIECARYS

Botanical Order
LEGUMINOSAE

Native of	Height	Flowers in	Duration	Cultivated
Italy	in inches	June, July	Perennial	in 1866

No. 124

The name of this genus has been handed down from the ancients, and is derived from the Greek *onon*, an ear; and *hira*, to delight; in consequence of the partiality of those animals towards the plant which originally bore the appellation; but that it was any one which is now so called, is not quite certain. *Hirca*, from the Latin *hirca*, a goat; is alluded to the goat-like smell of the herb. Our English species, the *Ononis spinosa*, obtained the name of *Hest-plough* or *Hest-barrow*, from the resistance given by its strong cord-like roots to the implements of the farmer.

Several species of the *Hest-barrow*, even the wild one of the English banks, the *Ononis spinosa*, are rendered very ornamental, if kept in pot, gravely soil; but when planted in rich light earth, both the roots and branches, of the latter one in particular, extend themselves under, and but few flowers are proportionally yielded.

The stems of this species are herbaceous, and the root is hard and woody, like the wild one just noticed. It may be propagated from seeds, sown in the spring; or the roots may be divided.

Bot. Kew. &c. 176.

TULIPA SUAVEOLENS.

SWEET-SCENTED, OR VAN THOLL TULIP.

Class.

HEXANDRIA.

Order,

MONOGYNIA.

Natural Order.

LILIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
S. Europe.	9 inches.	April.	Perennial.	in 1603.

No. 175.

The name Tulipa is believed to have been derived from the Persian term tulipan, which signifies a turban; an eastern article of dress, sometimes made very similar to a well-shaped tulip. Suaveolens, formed from the Latin suavis, sweet. The Dutch cultivate this early flowering species under the name of Duc Van Tholl, and the appellation is now pretty fully established with us.

The Tulip, in Persia, is considered an emblem of perfect love; or, according to Chardin, we should say, burning love; for he observes, that when a lover presents a tulip to the mistress of his affections, he means to inform her, by the general colouring of the flower, that he is on fire with her beauty; and by the black anthers in its centre, that his heart is burnt to a coal.

To recount the various extravagances into which the Dutch and French florists of the seventeenth century were carried, by their zeal and rivalry in the cultivation of the tulip, and the effects arising out of this Tulipomania, or the game which it represented, would occupy a large volume, independent of any further history of the plant.

It should be observed, that the present species never gave rise to much of the gambling system attributed to the tulip; but that the principal attention always rested on the *Tulipa Gesneriana*, or common garden tulip, which shall have notice at a future time. There are, notwithstanding, some beautiful varieties of the early flowering sorts, of different colours, which the Dutch florists cultivate, and honour with high-sounding names.

When planted in the borders, from six to twelve, or more, bulbs may be put in at four inches asunder, so as to form an irregularly shaped little bed; for complete circles, ovals, or straight rows, should always be avoided in the mingled parterre. The soil should be well stirred to the depth of nine inches, and, if stiff, a little sand may be mixed with it. Then take out the soil four inches deep, and having removed the hard brown skin from the bulbs, plant them; fill up with the soil again, and make the whole level. If the situation be damp, or the soil too retentive, a little sand should be placed round the bulb; but if very light, it may be stirred, and the bulbs put in by making holes with a dibble to receive them.

For the earliest flowers, plant from the beginning of September to the end of October; but for later flowers, plant in February. If, in autumn, Van Tholl tulip bulbs be planted singly, in small pots of light rich soil, they will blossom extremely well in the drawing room, and contrast prettily with hyacinths in glasses; but should be frequently exposed to fresh air. They will flower in water, as hyacinths, but less certain, and less luxuriantly.

Hort. Kew. 2, v. 2, 249.

SCILLA BIFOLIA.

TWO-LEAVED SQUILL.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
ASPHODELEÆ.

Native of Europe.	Height. 5 inches.	Flowers in Mar. April.	Duration. Perennial.	Cultivated in 1633.
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No. 176.

The Greeks had their SCHILLA, by which name was designated a large bulbous-rooted plant, of acrid and rather deleterious quality; used to form cataplasms for curing the bites of serpents. From this has our name originated.

We have previously given the English variety of this species of Scilla, but the present one is so distinct, at first sight, that it may be mistaken for another plant, and should therefore be noticed.

It is not given by Gerarde; but Johnson, in his edition of Gerarde's Herbal, added many plants to this family, and amongst them, one that has been considered synonymous with the present subject. He has, indeed, many very respectable wood cuts in his class Hyacinthus,—“Those bulbed roots,” as he observes, “whose faire and beautifull Floures are received for their grace and ornament in gardens and garlands.” A great portion of our genus Scilla, in days of less botanical acumen, was combined under the name Hyacinthus.

The roots may be divided at almost any period, but the season from Midsummer to Michaelmas should be preferred.

Hort. Kew. 2, v. 2, 264.

ROSE & HIBISCUS

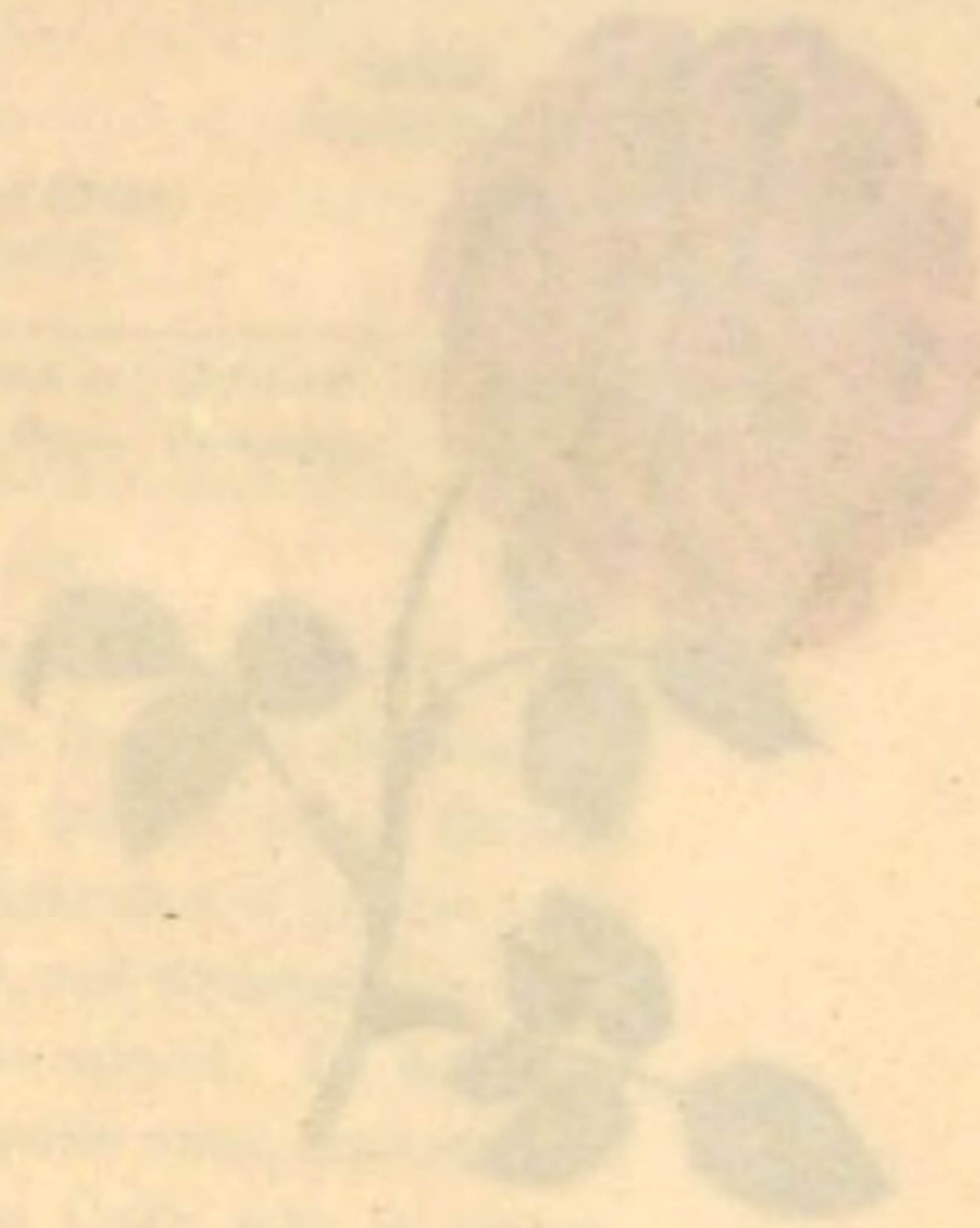
CHINA, HONGKONG, &c.

Class 1st

Class 2nd

Class 3rd

Class 4th





Rosa semperflorens.



Leythracium Americanum.



Gentiana verna.



Stevia purpurea.

ROSA SEMPERFLORENS.

CRIMSON CHINESE ROSE.

Class.

ICOSANDRIA.

Order.

POLYGYNIA.

Natural Order.

ROSACEÆ.

Native of China.	Height. 2 feet.	Flowers in May, Sept.	Duration. Perennial.	Introduced in 1789.
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No. 177.

In giving our readers the derivation of the term Rosa, we cannot do better than take the words of that talented botanist, the late Sir James Edward Smith. He thought the derivation of generic terms of considerable importance, and therefore has, himself, spent much time on the subject. He describes this as "An ancient and popular name, derived, with most probability, from the Celtic RÔS or RHOS; whence comes also its Greek synonym, RODON; and the name of the same flower in various modern languages, Rose, Rosa, &c. De Theis remarks, that the Celtic RHODD or RHUDD, signifying red, is the primary root of these words, the rose colour being almost synonymous with redness. Hence also came RHUS, RUBIA, RUBUS, and the Greek name of the pomegranate, ROA or RODIA, still in use. All these words have a manifest reference to a red colour in some part of each of the plants."

Unqualified admiration of the Rose is, perhaps, nearly coeval with human nature itself. We cannot, indeed, trace its history back to our first parents in paradise, but we may be allowed to indulge the fancy that paradise was not without Roses; and

the admiration of flowers constituted one of their sources of happiness.

The prophet Isaiah makes it the similitude of the joyful flourishing of Christ's church; and philosophers and poets, of all ages, have conferred on it their tribute of praise; of this, hereafter, we shall supply more ample testimony.

This semidouble variety of the *Rosa semperflorens* was brought from China, about thirty years ago; and, according to Mr. Curtis, was then considered "one of the most desirable plants, in point of ornament, ever introduced into this country." Its delicacy bespeaks it adapted to the hall, or the possession of a choice situation on the border. But of all circumstances under which it can be shown, none render it more attractive than those afforded by budding or grafting.

Budding the Rose has yielded a display of these flowers under a character which has greatly increased their attraction. Thus, beautiful bouquets of various species of roses, growing at the height of five or six feet, on single stems of the wild rose or hip, when judiciously scattered over the lawn, or mingled with minor shrubs, constitute a modern fairy-land, that even the magnificence of Syrian floriculture never surpassed. As opportunity occurs, we intend noticing the cultivation of roses in all its modifications; and hope that we may be able so to stimulate the exertions of our friends, that many of them, even ladies, may be induced to undertake the pleasing operation of budding, for which we promise them explicit directions, previous to the next season.

Hort. Kew. 2, v. 3, 266.

ERYTHRONIUM AMERICANUM.

YELLOW-FLOWERED DOG'S-TOOTH VIOLET.

Class.

HEXANDRIA.

Order.

MONOGYNIA.

Natural Order.

LILIACEÆ.

Native of N. America	Height. 4 inches.	Flowers in April.	Duration. Perennial.	Introduced in 1665.
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No. 178.

Erythronium, from the Greek ERUTHROS, signifying red, either in allusion to the flower of the better known species, Erythronium Dens Canis, or to the stain on the leaves. Another species has been found in America, which has occasioned some botanists to call this Erythronium flavum; but the trivial name Americanum is now too well established to admit the change.

The medicinal virtues of this plant are known in America, and its bulbs have been found to possess an emetic property; twenty or thirty grains of which form a dose. When thoroughly dried they lose nearly the whole of this quality.

Notwithstanding this very beautiful little spring flower bears our winters uninjured, and also increases in the open ground, still its blossoms are sparingly produced. This appears to be partially remedied by keeping it in a deep narrow pot, and if it be inconvenient to shelter it, during winter, in a cold frame, the pot may be wholly sunk in the open border. It should be planted in sandy peat, and at the depth of four, or even five, inches beneath the surface of the soil.

Hort. Kew. 2, v. 2, 248.

ERYTHRONIUM AMERICANUM.

YELLOW-FLowered DOG'S-TOOTH VIOLET.

It is a perennial root, with a single stem, and a single leaf, which is lanceolate, and has a long petiole. The flowers are yellow, and are produced in a loose raceme. The root is used in medicine, and is said to be a powerful diuretic.

Height of plant in flower.	Height of plant in fruit.	Height of plant in seed.
1 to 2 feet.	1 to 2 feet.	1 to 2 feet.

The medicinal virtues of this plant are known in America, and its roots have been found to possess an emetic property; twenty or thirty grains of which form a dose. When thoroughly dried they lose nearly the whole of this quality. Notwithstanding the very beautiful little spring flowers, and the white, unguished, and also in-crease in the open ground, still its blossoms are sparingly produced. This appears to be partially remedied by keeping it in a deep narrow pot, and if it be inconvenient to shelter it, during winter, in a cold frame, the pot may be wholly sunk in the open border. It should be planted in sandy peat, and at the depth of four, or even five, inches beneath the surface of the soil.

GENTIANA VERNA.

SPRING GENTIAN.

Class.
PENTANDRIA.

Order.
DIGYNIA.

Natural Order.
GENTIANEÆ.

Native of Britain.	Height. 3 inches.	Flowers in April.	Duration. Perennial.	Cultivated in 1596.
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No. 179.

Gentiana, a name given after Gentius, king of Illyria, who lived about two centuries before the birth of Christ. Verna, from the Latin ver, the spring, in allusion to the season of its flowering.

This beautiful little vernal gem has been found wild, according to Withering, in the county of Durham, particularly in Teesdale Forest, and also in Westmoreland. It should be classed amongst the more rare British plants, and may be considered as legitimately belonging to the mountainous provinces of a more southern latitude, as the Pyrenees, Switzerland, and some parts of Germany.

The principal error in the cultivation of this little plant appears to consist in paying it too much attention. We have seen it succeed, to admiration, in a retentive soil, rather shady and moist, where it has remained undisturbed, and the soil acquired a clothing of liverwort, in consequence of having had no acquaintance with the gardener's rake or hoe. It appears sufficient that the soil about it be kept clear of such weeds as are taller than the plant itself, and that it be completely free from the dripping of trees and shrubs.

Hort. Kew. 2, v. 2, 112.

GEWIAVA VIRGINICA

SPRING CENTRAL

Order
DWARF

Class
TENDRONS

Flowers of
GENTIANA

Flowers of	Height	Flowers in	Flowers in	Cultivated
British	3 inches	April	May	in 1850

No. 179

Gentiana, a name given after Gentius, king of Illyria, who lived about two centuries before the birth of Christ. Verum, from the Latin ver, the spring, in allusion to the season of its flowering.

This beautiful little vernal gem has been found wild, according to Withering, in the county of Dorset, particularly in Teasdale Forest, and also in Westmoreland. It should be classed amongst the more rare British plants, and may be considered as legitimately belonging to the mountainous provinces of a more southern latitude, as the Pyrenees, Switzerland, and some parts of Germany.

The principal error in the cultivation of this little plant appears to consist in paying it too much attention. We have seen it succeed, to admiration, in a retentive soil, rather shady and moist, where it has remained undisturbed, and the soil acquired a clothing of liverwort, in consequence of having had no acquaintance with the gardener's rake or hoe. It appears sufficient that the soil about it be kept clear of such weeds as are taller than the plant itself, and that it be completely free from the dripping of trees and shrubs.

Bot. Kew. 2, v. 2, 112

STEVIA PURPUREA.

PURPLE STEVIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA ÆQUALIS.

Natural Order.
CORYMBIFERÆ.

Native of Mexico.	Height. 2 feet.	Flowers in September.	Duration. Perennial.	Introduced in 1812.
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No. 180.

Stevia was adopted as the name of this genus of plants by Cavanilles, in honour of Dr. Steve, or Esteve, a physician, who was botanical professor at the university of Valencia, about the middle of the 16th century.

The *Stevia purpurea* is herbaceous, and of rather low and slender growth, requiring support. It is less showy than most of our popular favourites, but when growing together in sufficient quantity, and in full flower, its corymbs of delicate blossoms are by no means uninteresting, nor are they wanting in ornament.

It may be planted in an open warm border, if the soil be light and tolerably dry; but as it readily strikes root from cuttings, taken about Midsummer, it will be advisable to reserve one or more plants in a pot, to be protected in a cold frame, during winter. This will render its preservation sure, which may be somewhat doubtful as respects the plants in the open ground, in case of a very severe winter. Sandy loam, either alone, or mixed with a small quantity of peat, is very congenial to the growth of any of the species of *Stevia*.

Hort. Kew. 2, v. 4, 510.

STEVIA PURPUREA.

PURPLE STEVIA.

Class. SYNGONIA.
Order. POLYGAMIA REGALIS.
Natural Order. COMPOSITAE.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	2 feet.	September.	Perennial.	in 1812.

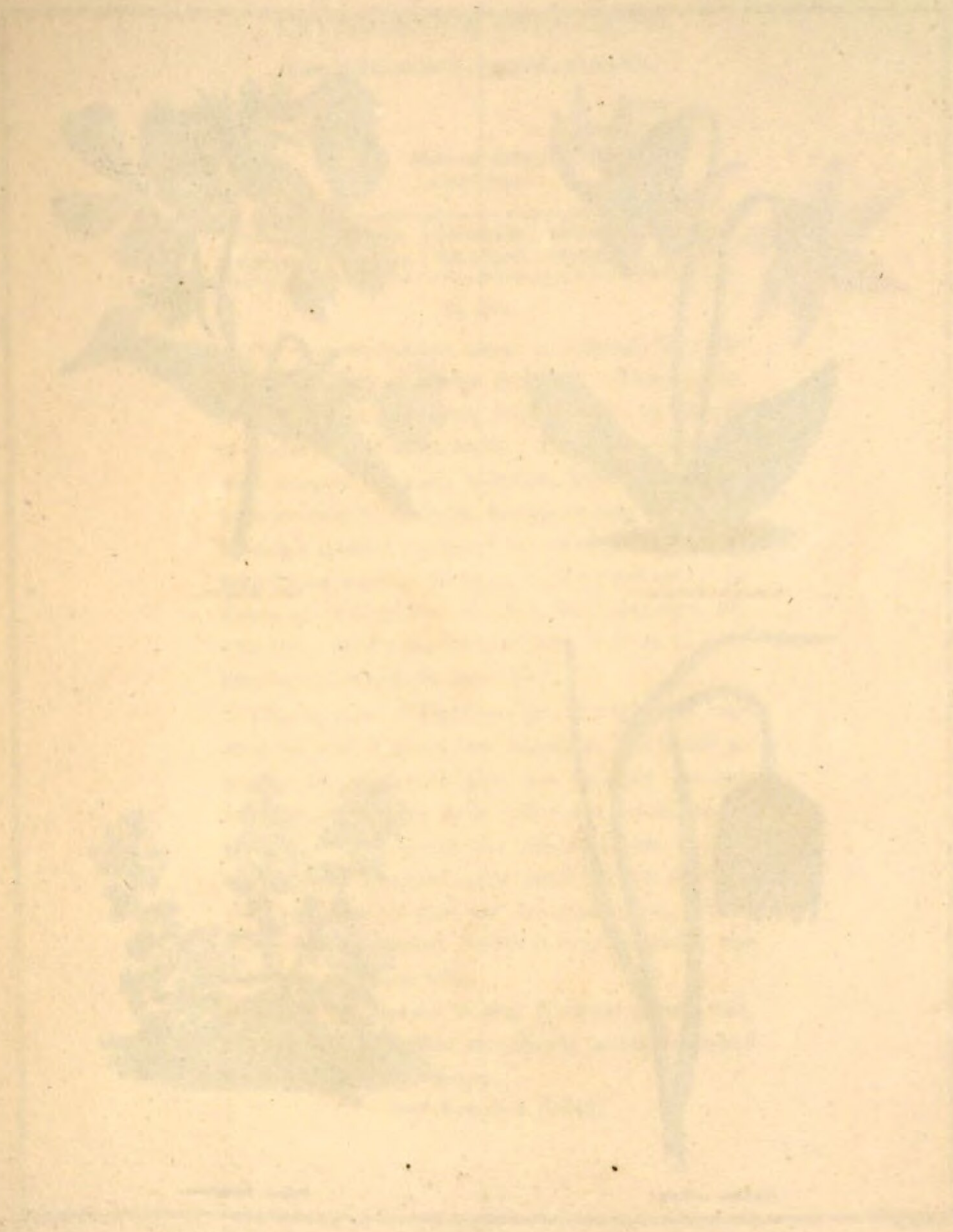
No. 180.

Stevia was adopted as the name of this genus of plants by Cavendish, in honour of Dr. Steve, or Estey, a physician, who was botanical professor at the university of Valencia, about the middle of the 18th century.

The Stevia purpurea is herbaceous, and of rather low and slender growth, requiring support. It is less showy than most of our popular favourites, but when growing together in sufficient quantity, and in full flower, its corolla of delicate blossoms are by no means uninteresting, nor are they wanting in ornament.

It may be planted in an open warm border, if the soil be light and tolerably dry; but as it readily strikes root from cuttings, taken about Midsummer, it will be advisable to reserve one or more plants in a pot, to be protected in a cold frame, during winter. This will render its preservation sure, which may be somewhat doubtful as respects the plants in the open ground, in case of a very severe winter. Sandy heath, either alone, or mixed with a small quantity of peat, is very congenial to the growth of any of the species of Stevia.

Her. Kew. 2, t. 4, 516.





Erythronium dens canis.

75



Phlox divaricata.

76



Fritillaria meleagris.

77



Thymus lanuginosus.

J. Webb sculp.

E.D. Smith del.

ERYTHRONIUM DENS CANIS.

COMMON DOG'S-TOOTH VIOLET.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
LILIACEÆ.

Native of Europe.	Height. 5 inches.	Flowers in Mar. April.	Duration. Perennial.	Cultivated in 1596.
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No. 181.

The present generic name is derived from the Greek, as noticed under No. 178. Dens canis, from the Latin, signifying Dog's-tooth; in allusion to the form of its white bulbs. This term originated with some of the early botanists, from whom it has been introduced to all the European languages. In French it is called LE DENT DE CHIEN. In Italian, DENTE DI CANE. In German, HUNDSZAHN. In Russian, KANDIK. In Spanish, DIENTE DE PERRO. In Portuguese, DENTE DE CAO; each language yielding the same idea.

This species of Erythronium, though less rare than the yellow, is not less beautiful, and which no garden should be without; but as there are two varieties, with very little difference, excepting in the size of their leaves, the largest should be preferred, as it blossoms quite freely, which we have observed is not the case with the smaller one. There is also a white variety, which is very desirable, and not commonly met with.

It may be planted in any common garden soil, and requires no further care than is usually bestowed on crocuses or snowdrops.

ERYTHRONIUM DENS CANIS.

COMMON DOG'S-TOOTH VIOLET.

Order.
MONOCOTYLEDONALES.

System of Order.
Liliaceae.

Class.
HYPERICACEAE.

Native of Europe.	Flowers 2-lipped.	Flowers in racemes.	Flowers in racemes.	Flowers in racemes.
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No. 181.

The present generic name is derived from the Greek, as noticed under No. 178. *Dens canis*, from the Latin, signifying Dog's-tooth; in allusion to the form of the white petals. This term originated with some of the early botanists, from whom it has been introduced to all the European languages. In French it is called *dent de chien*. In German, *Hundszahn*. In Russian, *zambik*. In Spanish, *dent de perro*. In Portuguese, *dent de cão*; each language yielding the same idea.

This species of *Erythronium*, though less rare than the yellow, is not less beautiful, and which no garden should be without; but as there are two varieties, with very little difference, excepting in the size of their leaves, the largest should be preserved, and the smaller quite freely, which we have observed is not the case with the smaller one. There is also a white variety, which is very desirable, and not commonly met with.

It may be planted in any common garden soil, and requires no further care than is usually bestowed on garden plants.

Herb. Kew. 2, v. 2, 249.

PHLOX DIVARICATA.

EARLY BLUE-FLOWERED PHLOX.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
POLEMONIACEÆ.

Native of N. America	Height. 9 inches.	Flowers in May.	Duration. Perennial.	Introduced in 1746.
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No. 182.

Phlox, from the Greek PHLOX, signifying flame. Lychnidea was formerly the name in general use for this tribe of plants, and is of the same import as Phlox; but it is not evident why either of them have been thus applied. Divaricata, from its divaricate stems.

The original plants of this genus were all introduced from America, but the zeal of European florists has added to our collections many varieties of this showy family. New sorts having been raised from seeds, and upwards of forty species and varieties are now in cultivation.

The Phlox divaricata is a very distinct species, unlike any other that has hitherto been introduced into the English gardens.

We have kept this plant, very successfully, in a rather cool and shady, and not particularly dry, situation. The soil, a mixture of peat and light loam. If it be left more than three or four years without a removal, the roots will become closely matted on the surface of the soil, and ultimately decline in luxuriance. It may be divided for increase in the autumn, or early in the spring.

Hort. Kew. 2, v. 1, 326.

PHLOX DIVARICATA.

EARLY BLUE-FLOWERED PHLOX.

Class. PHLOXACEAE.
Order. MONOCOTYLEDONALES.
Natural Order. MONOCOTYLEDONALES.

Native of N. America	Height 9 feet	Flowers in May	Flowers in June	Introduced in 1748
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No. 182

Phlox, from the Greek *phlox*, signifying flame. *L. ychnides* was formerly the name in general use for this tribe of plants, and is of the same import as *Phlox*; but it is not evident why either of them have been thus applied. *Divaricata*, from its divaricate stems.

The original plants of this genus were all introduced from America, but the zeal of European florists has added to our collection many varieties of this showy family. New sorts having been raised from seeds, and upwards of forty species and varieties are now in cultivation.

The *Phlox divaricata* is a very distinct species, unlike any other that has hitherto been introduced into the English gardens.

We have kept this plant, very successfully, in a rather cool and shady, and not particularly dry situation. The soil, a mixture of peat and light loam. If it be less than three or four years without a removal, the roots will become closely matted on the surface of the soil, and ultimately decline in luxuriance. It may be divided for increase in the autumn, or early in the spring.

Bot. Kew. 2, v. 1, 220.

FRITILLARIA MELEAGRIS.

CHEQUERED FRITILLARIA.

Class. **HEXANDRIA.** *Order.* **MONOGYNIA.**

Natural Order. **LILIACEÆ.**

Native of Britain.	Height. 1 foot.	Flowers in April, May.	Duration. Perennial.	Inhabits Meadows.
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No. 183.

The term *Fritillaria* has been given as a derivative from the Latin *fritillus*, said to be in allusion to a chess or draught board, from the chequered pattern of the flowers; though the Latin term applies alone to the dice box, and not to the board. *Meleagris*, a guinea-hen, from the resemblance of some of these singularly freckled flowers to the plumage of those fowls. Snake's-head appears to be the most prevailing English name for this plant; though the old appellations *Chequered Daffodil*, and *Guinea-hen Flower*, are not altogether exploded.

The variety figured seems to stand at the head of a numerous offspring of different colours; and though of less specious character claims priority of notice. Parkinson, in his *Paradisus Terrestris*, observes, that many sorts had lately been found, as white, red, black, and yellow, besides the purple, which was first known; and of each of them there were divers sorts. It may be conceived that he was rather an admirer of the *Fritillaria*, for after observing that he knew of no peculiar medical properties that it possessed, he says, "The chiefe or onely vse thereof is to be an ornament for the

of one--?

gardens of the curious louers of these delights, and to be worne of them abroad, which for the gallant beauty of many of them, deserueth their courteous entertainment, among many other the like pleasures."

It is usually propagated by offsets from the bulbs, which may be removed at any time after the decay of the tops, till they again begin to vegetate; and they will grow in almost any soil or aspect. If the bulbs be taken up they should not be kept out of the ground more than a month, or they will wither and be destroyed.

The Dutch florists obtain new varieties by raising them from seed; a practice rarely pursued in England, and of which we have had no experience. Miller directs that the seed be sown in August, in boxes of light earth; for if kept longer, he says it will not grow. Give partial shade till October, but admit the full advantage of the sun during winter, and protect from severe frosts. The young plants will be an inch high in March, when they should be kept free of weeds; exposed only to the morning sun during the heat of summer, and be watered as occasion may require. In August, when the tops will be decayed, spread the boxes of soil, together with the small young bulbs that are mingled amongst it, on a bed prepared in a warm aspect, and cover the whole, a quarter of an inch deep, with light fresh loam. Here the roots may remain till they flower, which will generally be in the third year; though some will remain till the fourth. As they blossom they should be marked so that each bulb may be the more readily disposed of according to its quality.

Hort. Kew. 2, v. 2, 244.

THYMUS LANUGINOSUS.

WOOLLY THYME.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of Britain.	Height. 3 inches.	Flowers in June, Aug.	Duration. Perennial.	Inhabits dry banks.
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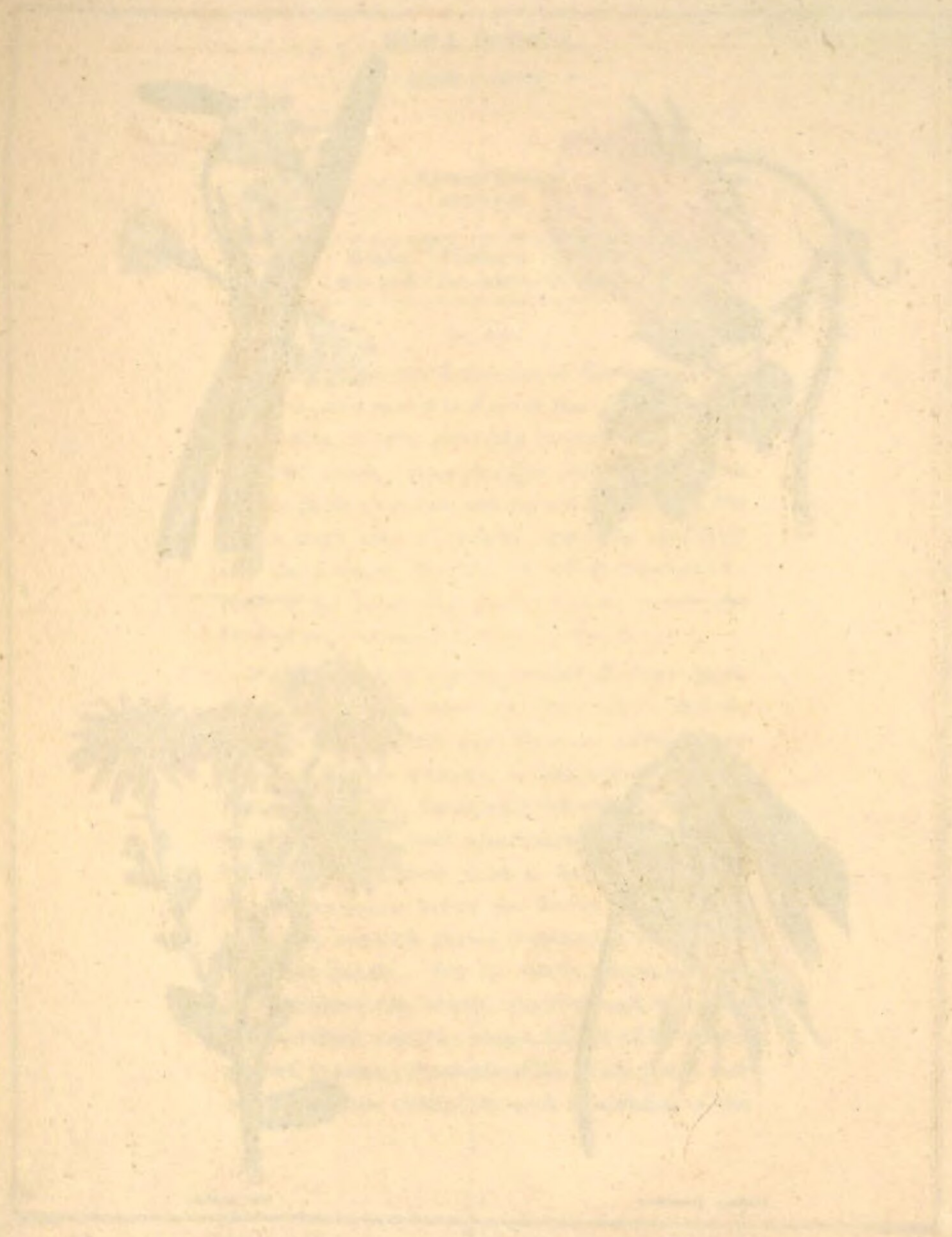
No. 184.

A difference of opinion has existed respecting the origin of the word Thymus. It is of Greek extract, and some have considered it as derived from THUO, to burn, or to sacrifice; from its having been used in the temples of the ancients, both in the garlands, and as incense, at their sacrifices. Its more probable parent seems to be the Greek word THUMOS, signifying courage, or strength, which may have been thought increased by its cordial stimulant qualities. Lanuginosus from the Latin, in allusion to its peculiarly soft woolly feel and appearance.

This species of Thyme was originally noticed as a variety of the Thymus serpyllum, or wild Thyme; but whether it maintains a permanent specific difference, or otherwise, it is certainly worthy of a place amongst the alpine plants, or on the artificial rock work.

It may be divided in the spring, for increase; and should be planted in poor sandy loam; where it can be kept tolerably dry, and fully exposed to the warmth of the sun. A border, sloping towards the south, with a little of the proper earth, will afford it a very suitable situation.

Hort. Kew. 2, v. 3, 413.





Rosa Indica.

76



Lencojum aestivum.

76



Vinularia grandiflora.

76



Aster amellus.

76

ROSA INDICA.

CHINA ROSE.

Class.

ICOSANDRIA.

Order.

POLYGYNIA.

Natural Order.

ROSACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
China.	3 to 15 ft.	Jan. to Dec.	Perennial.	in 1789.

No. 185.

Having given the derivation of Rosa under No. 177, it is unnecessary to do so in this place. Indica, from India, a term generally employed in a very extended sense, comprehending not only the two Asiatic peninsulas, east and west of the Ganges, but also a large tract of country spreading northerly over the Chinese Empire; as well as numerous islands in the Indian and pacific oceans, such as the Phillipines, Borneo, Sumatra, Ceylon, &c.

Notwithstanding a great number of Roses have, of late years, been introduced from China, still the common blush, which now forms so prominent an ornament to this country, is distinctly known as THE China Rose, unencumbered with further explanation. The usual appearance of this Rose is loose and open, much more so than our drawing, which was taken before the flower became fully expanded, at which period it possesses great delicacy and beauty. On its further expansion the petals assume a recurvity, which, though it lessens the individual rose-like shape, has no effect on the gay and imposing character of the whole plant; nor on the pleasure excited by such a profusion of the

beauties of the vegetable world raising themselves against the front of the humblest cottage, and proudly telling each passer-by, that health and comfort reside within.

Mr. Loudon, in his very comprehensive Encyclopædia of Gardening, observes that Villaresi, at the royal gardens of Monza, has raised upwards of fifty varieties of the *Rosa Indica*; some of them quite black, others shaped like a *ranunculus*, and many of them highly odoriferous. Villaresi, as a propagator of Roses, is well known; and in this age of *Rosa-mania*, and wandering propensities of the English, when a tour to Italy excites but little more concern than a twenty-mile journey did to our forefathers, it is singular that England has not been furnished with these novelties.

For the production of new varieties of Roses it is necessary to plant different sorts together, by which means the flowers of one sort become, occasionally, impregnated with the qualities of another, and the seeds subsequently matured from such flowers, produce young plants of a hybrid or mixed character; and indeed sometimes possessing qualities highly superior to either parent. For this purpose the *Rosa Indica* may be most advantageously mixed, as it was by Villaresi, with the various European species; for though the seeds of many of our best dark coloured roses rarely come to maturity in this climate, still the anthers of such are perfect; and their farina, doubtless, will produce the necessary fructifying qualities on such sorts as perfect their hips freely in England, which is the case with the China Rose.

Hort. Kew. 2, v. 3, 266.

LEUCOJUM ÆSTIVUM.

SUMMER SNOWFLAKE.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
AMARYLLIDÆ.

Native of Britain.	Height. 1 foot.	Flowers in May.	Duration. Perennial.	Inhabits moist mead.
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No. 186.

Leucojum, a name from the Greek, supposed to have been applied by Theophrastus to the Linnean Galanthus. It is derived from LEUKOS, white; and ION, a violet. Our old English writers termed this a bulbous violet; and some have also conformed to the Greek, by spelling it Leucoium. Æstivum, from the Latin æstas, summer.

This plant was first noticed, growing wild, by Mr. Curtis, near Woolwich, and has since been gathered by others in moist situations near the Thames; and also in Westmoreland, and other parts. When it is well established, and the bulbs increased, so as to produce several flowering stems near together, they become strong and very attractive; and certainly need not, as intimated by a modern writer, be distinguished as belonging alone to rustic gardens. It is not always so luxuriant in a cultivated as in a wild state; which arises merely from a deficient supply of moisture. It succeeds well in peat earth, in an eastern aspect, and damp situation, where many other plants would decay. The bulbs sustain the least injury by being removed in August or September.

Hort. Kew. 2, v. 2, 212.

UVULARIA GRANDIFLORA.

LARGE-FLOWERED UVULARIA.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
MELANTHACEÆ.

Native of N. America	Height. 1 foot.	Flowers in May, June.	Duration. Perennial.	Introduced in 1734.
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No. 187.

Much has been said in support of an observation of Linneus, relative to the term *Uvularia* being derived from the resemblance of its inflorescence to the uvula, a small conical substance which is pendent over the root of the tongue in the human subject. It cannot be matter of surprise that so great a genius should have registered an idea hastily, or in mistake; but, on the contrary, it is wonderful that he effected so much, with so great a degree of correctness and penetration. The appellation *Uvularia* originated, without doubt, in the use of a plant, for the cure of diseased uvula. Linneus applied the term to the present genus, but the old herbalists gave it to a species of *Campanula*, which they used in gargles; to no part, however, of either plant, can be traced any likeness to the *Uvula*. *Grandiflora*, from the Latin, large-flowered.

The drooping yellow blossoms of the *Uvularia* are delicate and interesting; and though not very showy, they are well suited for the front of the borders. Notwithstanding it is perfectly hardy, we have lost it when planted in a light peat; but it grows and increases freely in a fresh loamy soil.

Hort. Kew. 2, v. 2, 247.

UVULARIA GRANDIFLORA

LARGE-FLOWERED UVULARIA

Color
Flowers

Height
Flowers

Native of
Flowers

Native of	Flowers in	Height	Flowers in	Native of
Flowers	Flowers	Flowers	Flowers	Flowers

No. 187

Although has been said in support of an observa-
tion of Linnaeus, relative to the term *Uvularia* being
derived from the resemblance of its inflorescence
to the uvula, a small conical substance which is
pendent over the root of the tongue in the human
subject. It cannot be matter of surprise that an
observer should have registered an idea hastily,
or in mistake; but, on the contrary, it is wonderful
that he effected so much, with so great a degree
of correctness and penetration. The application
Uvularia originated, without doubt, in the use of
a plant, for the cure of hoarse and inflamed
applied the term to the present genus, but the old
herbals gave it to a species of Campanula, which
they used in gargles; to no part, however, of either
plant, can be traced any likeness to the *Uvula*.
Grandiflora, from the Latin, large-flowered.

The drooping yellow blossoms of the *Uvularia* are
delicate and interesting; and though not very showy,
they are well suited for the front of the border.
Notwithstanding it is perfectly hardy, we have lost
it when planted in a light soil; but it grows and
increases freely in a fresh loamy soil.

A'STER AMELLUS.
ITALIAN STARWORT.

Class. **SYNGENESIA.** *Order.* **POLYGAMIA SUPERFLUA.**

Natural Order.
CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	18 inches.	Sep. Oct.	Perennial.	in 1596.

No. 188.

Aster, a Greek word, signifying a star, a term which is well applied to a family of radiated flowers, like the present.

The appellation, Amellus, is retained as a trivial name for this plant from the probability, indeed, almost certainty, that it is the same which is alluded to in the fourth book of the Georgics, where Virgil describes his Amellus as growing near to the winding stream of Mella. Martyn observes that there are several rivers of this name; but that to which Virgil alludes, is a river of Lombardy. Hence arose, as he says, the ancient popular name of the plant, Amellus, used by the country people. It is also the Aster atticus of the old authors.

This plant has occupied the attention of all the commentators of Virgil; and his description of it has received numerous and rather curious constructions, which some of our readers will find pleasure in tracing. Martyn, in his Georgics of Virgil, is copious in extracts from various writers, and being himself a botanist, is better qualified for considering the subject, and determining the truth, than most of his predecessors.

Virgil prescribes the root of the Amellus, boiled in wine, as restorative food for bees. He seems to have had great pleasure in these insects, and is very minute in his directions for the proper care and management of them.

“A flow’r there is that grows in meadow ground,
Amellus call’d, and easy to be found;
For from one root the rising stem bestows
A wood of leaves, and vi’let purple boughs:
The flow’r itself is glorious to behold,
And shines on altars like refulgent gold:
Sharp to the taste, by shepherds near the stream
Of Mella found, and thence they gave the name.
Boil this restoring root in gen’rous wine,
And set beside the door, the sickly Stock to dine.”

Virgil’s allusion to a golden flower with purple leaves, which he applied to the disk and the ray of the Aster amellus, is somewhat perverted in the above translation of Dryden.

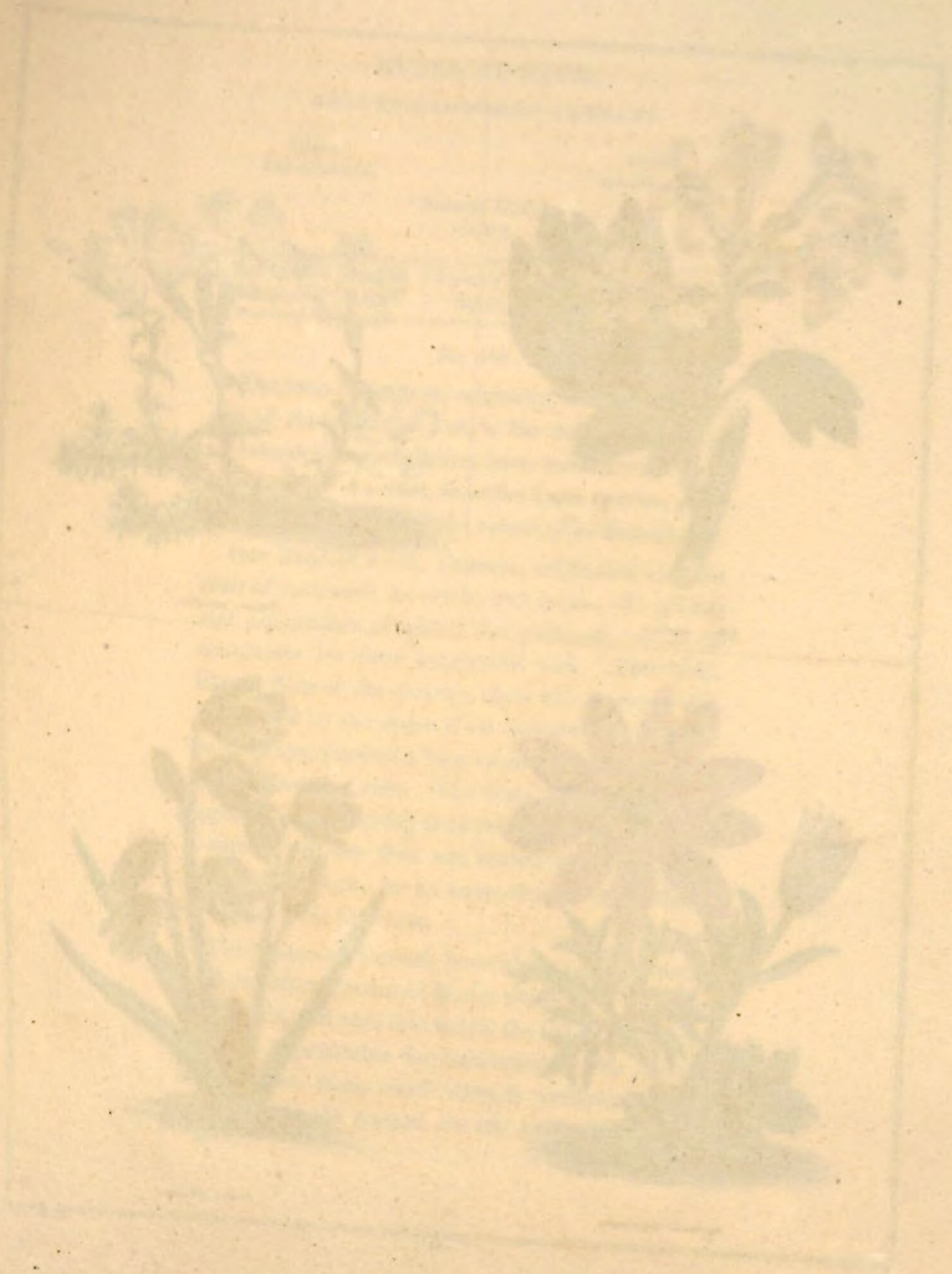
Our old English botanists were not unmindful of this supposed Classic Flower, for Gerarde gives us a laboured translation of Virgil; which Johnson, in his edition of Gerarde, has somewhat simplified.

“In Meades there is a floure, Amello nam’d,
By him that seeks it easie to be found,
For that it seemes by many branches fram’d
Into a little wood: like gold the ground
Thereof appears, but leaues that it beset
Shine in the colour of the Violet.”

Here Johnson evidently understood “Leaves” as applicable to the petals of the flower, which, most probably, Virgil intended.

This plant requires no peculiar management.

Hort. Kew. 2, v. 5, 54.





Ribes aureum.



Phlox nivalis.

3/4



Anemone hortensis.

3/4



Scilla sibirica.

3/4

RIBES AU'REUM.

GOLDEN-FLOWERED CURRANT.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CACTI.

Native of	Height.	Flowers in	Duration.	Introduced
N. America	8 feet.	April.	Perennial.	in 1812.

No. 189.

The term Ribes was, originally, a name for a species of rhubarb, but has, in the necessary change of botanical nomenclature, been transferred to another family. Aureum, from the Latin aureus, gold; in allusion to the beautiful colour of its flowers.

Our English word, Currant, originated with the fruit of commerce, known by that name; the growth and preparation of which the principal part of its consumers are little acquainted with. This well-known fruit of the grocer's shop was formerly distinguished by the name Uvæ Corinthiacæ, and is a small grape, produced by a variety of the vitis vinifera, or common vine. The term Corinthiacæ was applied from its having been principally raised about Corinth; and the fruit was known by the name of Corinthians; thence, by an easy change of spelling, came our term Currants.

The grapes of Corinth have always been noticed as the smallest produced in any country. Pliny observes this, and says that unless the soil be very rich they are unprofitable for cultivation. The labour bestowed on these small vines is unimportant, as they are merely trained on the earth, and other

crops, sometimes, cultivated in alternate rows with them. This accounts for the stones and earthy impurities that are found mixed with the fruit, when brought to England. It is now imported, principally, from Zante, an island of the Mediterranean; which is situated not far from their original place of produce, the Morea, known as the Peloponnesus of the ancients, where once stood the celebrated city of Corinth.

The golden-flowered Currant, now before us, is but little known, though a desirable addition to our gardens as a flowering shrub, and as a singular individual of a family so common. Its fruit is said to be held in high estimation in its native country; it is nearly black, larger and sweeter than the common black currant, and of very fine flavour. It flowers abundantly, but we never have seen it produce fruit, though we are credibly informed that, without peculiar care, it has done so in some parts of this country. It may, doubtless, be rendered productive, and we recommend it for experiment.

It grows freely in almost any soil or situation; but as a standard, both its flowers and foliage are small and inferior compared with such as are trained against a wall, even in a northerly aspect.

Make cuttings, about nine inches long, in February, of the preceding year's wood, and rub off all the buds excepting the two upper ones. Plant them a foot or more asunder, and keep them free from weeds. In October following, shorten the shoots, leaving only two or three eyes; and in twelve months afterwards they may be removed into their final situations.

Loudon's Ency. of Plants, p. 190.

PHLOX NIVALIS.

SNOW-WHITE PHLOX.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
POLEMONIACEÆ.

Native of N. America.	Height. 4 inches.	Flowers in May, June.	Duration. Perennial.	Introduced in 1822.
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No. 190.

The old name for this family of plants was Lych-
nidea, from the similarity of its flowers to those of
the Lychnis; a term which arose out of the Greek
word LUKNIS, a lamp, the wick of a lamp, or
flame. By Linneus, it was deemed inadmissible,
that one generic name should be founded on another;
and he is supposed to have obviated this irregu-
larity by making choice of the Greek word PHLOX,
signifying flame, on account of the apparent con-
nexion of the two words.

In a former number we have given the Phlox se-
tacea, a pink-flowered species, to which the Phlox
nivalis is very nearly related, in the aspect of its
foliage, and general habit of growth. It is a beau-
tifully delicate plant to flower in a pot; and strong
ones, in the borders, have a very attractive effect.

We have had it exposed to severe frosts, without
the least injury; it may, notwithstanding, be ad-
visable to protect a plant in a cold frame, or by a
hand-glass and matting on the border. It prefers
a rich light soil, mixed with peat, in a dry situation;
and is easily raised from cuttings, in the same man-
ner as the Phlox setacea, already noticed.

Sweet's Fl. Gar. t. 185.

This is the first time that the
 name of the plant has been
 recorded in the literature of
 the country. It is a very
 common plant in the
 country, and is very
 common in the country.

Name of the plant in the country	Name of the plant in the country
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The only name for this plant in the country is
 given, from the similarity of its flowers to those of
 the plant. It is a very common plant in the
 country, and is very common in the country. It is a
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 common in the country. It is a very common
 plant in the country, and is very common in the
 country. It is a very common plant in the
 country, and is very common in the country.

We have had it reported to several times, without
 the least delay; it may, notwithstanding, be
 difficult to find a plant in a cold country, or by a
 hand-plant and growing on the border. It grows
 a rich light soil, mixed with peat, in a dry situation;
 and is usually found from the country, in the same
 way as the plant, which is very common.

ANEMONE HORTENSIS.
GARDEN, OR STAR ANEMONE.

Class.
 POLYANDRIA.

Order.
 POLYGYNIA.

Natural Order.
 RANUNCULACEÆ.

Native of Italy.	Height. 1 foot.	Flowers in April.	Duration. Perennial.	Cultivated in 1597.
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No. 191.

The word Anemone is deduced from the Greek ANEMOS, which signifies wind; but although several reasons have been assigned, still it is not certain why it was first applied to this family of plants; see No. 145. Hortus, a garden; hortensis, growing in, or pertaining to, a garden.

The different single-flowered species and varieties belonging to this family, excepting the Poppy Anemone, are not much in cultivation. They seem to be superseded by the innumerable double-flowered varieties which are annually imported from the continent.

The present plant is desirable both for its gay flowers and its hardy habit; and also, like most other of the same genus, for the period at which it flowers; a period which presents occasional blanks in Flora's page, notwithstanding the brilliancy it displayed but two or three weeks earlier, when varieties of the crocus, hepatica, scilla, and narcissus, shone forth with vernal splendour.

A fresh light loamy soil is the most suitable; and the tubers may be divided at any time whilst vegetation is dormant.

Hort. Kew. 2, v. 3, 338.

ANNONONACEAE GARDEN, OR STAR ANNONA

Order
POLYTRICHA

Class
POLYTRICHA

Natural Order
ANNONACEAE

Native of	Height	Flowers in	Duration	Cultivated
Indy.	1 foot.	April	Perennial	in 1887

No. 101.

The word Annona is derived from the Greek ANEMOS, which signifies wind; but although several reasons have been assigned, still it is not certain why it was first applied to this family of plants; see No. 146. Hortus, a garden; hortensis, growing in, or pertaining to, a garden.

The different single-flowered species and varieties belonging to this family, excepting the Poppy Annona, are not much in cultivation. They seem to be superseded by the innumerable double-flowered varieties which are annually imported from the continent.

The present plant is desirable both for its gay flowers and its hardy habit; and also, like most other of the same genus, for the period at which it flowers; a period which presents occasional blanks in Flou's page, notwithstanding the brilliancy it displayed but two or three weeks earlier, when varieties of the crocus, hepatica, scilla, and narcissus, shone forth with vernal splendour.

A fresh light loamy soil is the most suitable; and the tubers may be divided at any time whilst vegetation is dormant.

Hort. Kew. 2, p. 228.

SCILLA SIBIRICA.

SIBERIAN SQUILL.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
ASPHODELEE.

Native of Siberia.	Height. 6 inches.	Flowers in Mar. Apr.	Duration. Perennial.	Introduced in 1800.
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No. 192.

Scilla, from a similar word used by the Greeks; and which is said to be applied, at the present day, in Greece, to the individual bulbous plant that was originally distinguished by it.

This interesting little subject blossoms very freely in the borders, or in pots; and is a pretty addition to a stand of early flowers. A collection of bulbous plants, consisting of various species of scilla, hyacinth, crocus, narcissus, tulip, &c. may be considered accessible to every one. Those who possess a flower garden, usually possess these; or, if to be purchased, they are not expensive. When planted in pots, in the autumn, and kept in a cool, airy, and light situation, till February or March, they afford us a delightful earnest of the prospective enjoyments of the forthcoming season, and thereby excite sensations of pleasure which the most magnificent productions of a declining year can never produce. Spring is always welcome.

"Come, thou, with Pleasure at thy side,
Diffuse thy vernal spirit wide;
Create, where'er thou turn'st thine eye,
Peace, plenty, love, and harmony." WEST.

Hort. Kew. 2, v. 2, 263.

SCILLA BIPARTITA SIBERIAN EGGPLANT

Order.
MAGNOLIACEAE

Order.
MAGNOLIACEAE

Natural Order.
MAGNOLIACEAE

Native of Siberia	Height in inches	Flowers in May, Apr.	Duration of fruit	Introduced in 1860
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No. 192

Scilla, from a similar word used by the Greeks; and which is said to be applied, at the present day, in Greece, to the individual bulbous plant that was originally distinguished by it.

This interesting little subject blossoms very freely in the borders, or in pots; and is a pretty addition to a stand of early flowers. A collection of bulbous plants, consisting of various species of scilla, hyacinth, crocus, narcissus, tulip, &c. may be considered accessible to every one. Those who possess a flower garden, usually possess these; or, if to be purchased, they are not expensive. When planted in pots, in the autumn, and kept in a cool airy, and light situation, till February or March, they afford us a delightful earnest of the prospective enjoyment of the forthcoming season, and thereby excite sensations of pleasure which the most magnificent productions of a declining year can never produce. Spring is always welcome.

“Crocus, then, with Primrose at its side,

Disseminates sweetest seeds.”

“Crocus, when its flower-time is o’er,

Flows, plenty, love, and harmony.”

Bot. Kew, 2, v. 2, 463.

Scilla
Bipartita
M. B. & C.



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